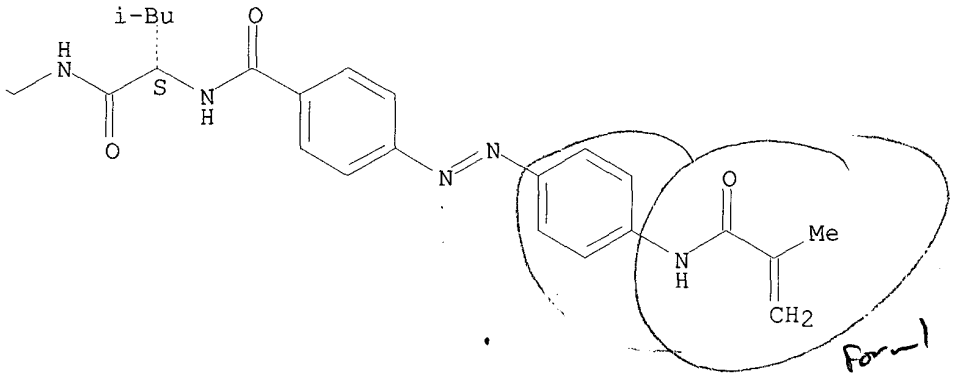
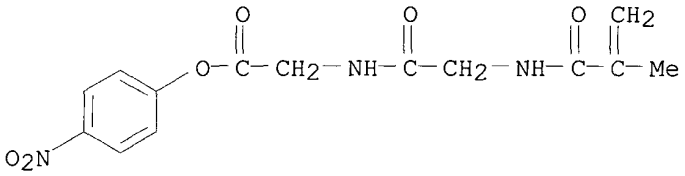


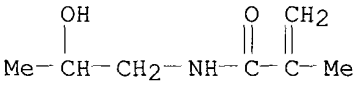
CM 2

CRN 57950-79-5
CMF C14 H15 N3 O6



CM 3

CRN 21442-01-3
CMF C7 H13 N O2



IT **258856-47-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of bioadhesive lectin-HPMA copolymer-**cyclosporin**

conjugates)
RN 258856-47-2 HCAPLUS
CN Cyclosporin A,
6-[(3R,4R)-3-hydroxy-N2,4-dimethyl-N6-[2-[[(2S)-4-methyl-2-
[[4-[[4-[(2-methyl-1-oxo-2-propenyl)amino]phenyl]azo]benzoyl]amino]-1-
oxopentyl]amino]ethyl]-6-oxo-L-lysine]-, polymer with
N-(2-hydroxypropyl)-
2-methyl-2-propenamide and N-(2-methyl-1-oxo-2-propenyl)glycylglycine
4-nitrophenyl ester (9CI) (CA INDEX NAME)

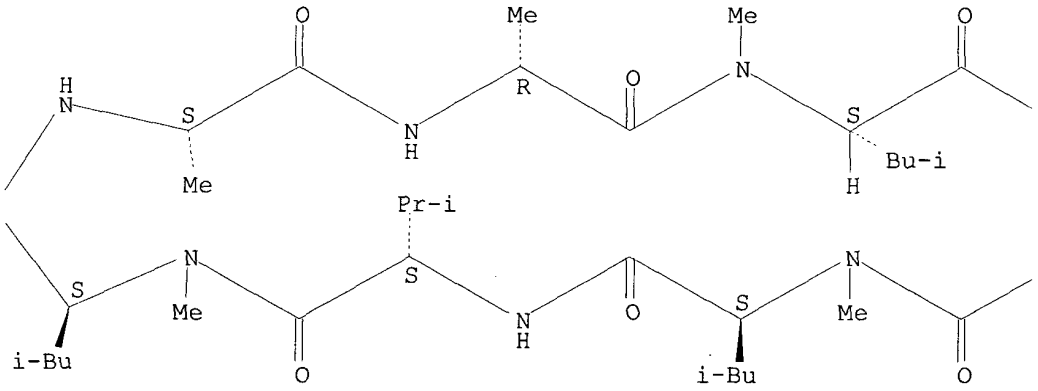
CM 1

CRN 258856-46-1
CMF C85 H137 N17 O16

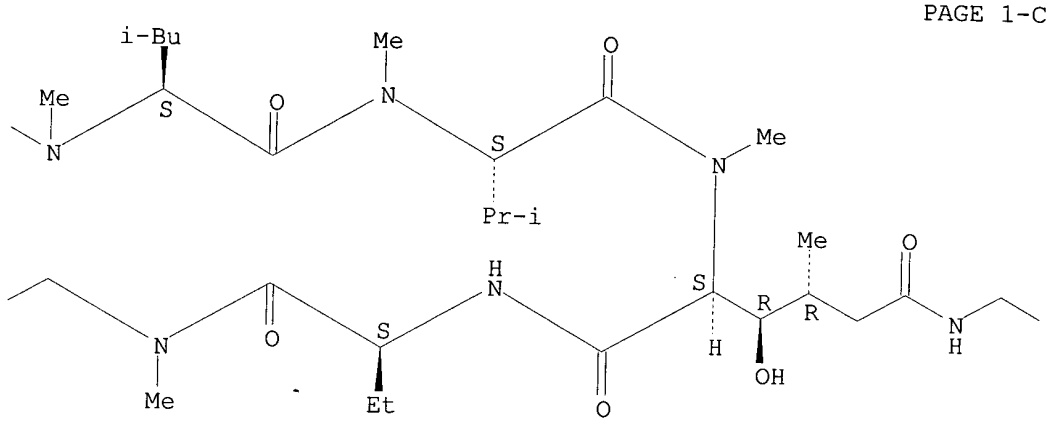
Absolute stereochemistry.
Double bond geometry unknown.

PAGE 1-A

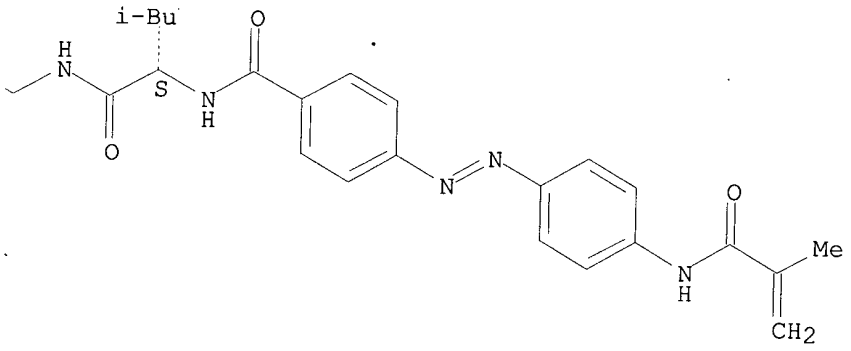
PAGE 1-B



PAGE 1-C

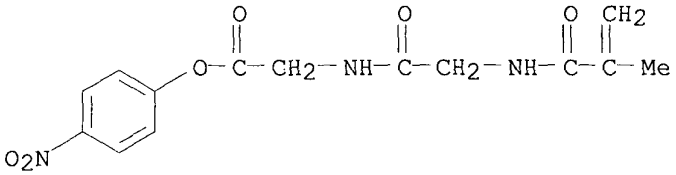


PAGE 1-D



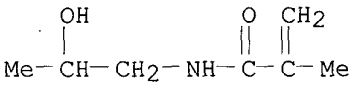
CM 2

CRN 57950-79-5
CMF C14 H15 N3 O6



CM 3

CRN 21442-01-3
CMF C7 H13 N O2



RE.CNT 23
RE
(1) Aiko, S; J Pharmcol Exp Ther 1997, V280, P1075 HCAPLUS
(2) Brynskov, J; Scand J Gastroenterol 1993, V28, P849 HCAPLUS
(4) Drewe, J; Br J Clin Pharmacol 1992, V33, P39 HCAPLUS
(5) Faulds, D; Drugs 1993, V45, P953 HCAPLUS
(6) Grim, Y; New Polym Mater 1991, V3, P49 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L43 ANSWER 2 OF 11 HCAPLUS COPYRIGHT 2001 ACS
AN 1999:777840 HCAPLUS
DN 132:322195
TI Liquid crystalline polyacetylenes: a new class of mesomorphic materials with novel optical and electronic properties
AU Tang, Ben Zhong; Lam, Wing Yip; Kong, Xiangxing; Lee, Priscilla P. S.; Wan, Xinhua; Kwok, Hoi-Sing; Huang, Yuan Ming; Ge, Weikun; Chen, Hongzheng; Xu, Ruisong; Wang, Mang
CS Dep. Chem. and Cent. Display Res., Hong Kong Univ. Sci. and Technol. (HKUST), Kowloon, Peop. Rep. China
SO Proc. SPIE-Int. Soc. Opt. Eng. (1999), 3800(Liquid Crystals III), 62-71
CODEN: PSISDG; ISSN: 0277-786X
PB SPIE-The International Society for Optical Engineering
DT Journal
LA English
AB Different kinds of polyacetylenes with general **mol.** structure of -[HC=C(C6H4-mesogen)]p- poly(arylacetylene)s and -HC=C[(CH2)n-mesogen]p- poly(alkylacetylene)s were designed and synthesized. Pendant interaction and backbone rigidity in the polymers are controlled through design to obtain polyacetylenes with interesting mesomorphic, optical, and electronic properties. The rigid polyacetylene backbone enables ready alignments of the LCPA **mols.** by simple mech. perturbations. Upon photoexcitation, the LCPAs with the poly(alkylacetylene) skeleton structure emit strong blue light clearly observable by the naked eye under

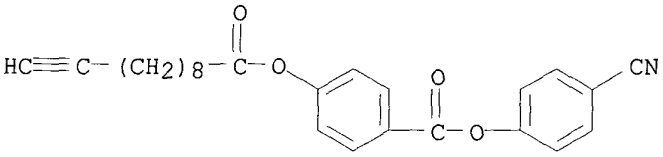
normal room illumination conditions. The shape and position of the emission peaks and the color of the emitted light can be manipulated by application of external elec. fields. The LCPAs exhibit excellent intrinsic photocond. in the visible spectral region in the undoped (pure) states, and doping with electron acceptor/donor further increases the photoconduction efficiency of the LCPAs.

IT **216219-49-7P 216219-50-0P 266370-81-4P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and morphol. and photoluminescence and cond. of liq. cryst. polyacetylenes with pendant alkyl- and aryl-mesogens)

RN 216219-49-7 HCAPLUS
CN Benzoic acid, 4-[(1-oxo-10-undecynyl)oxy]-, 4-cyanophenyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

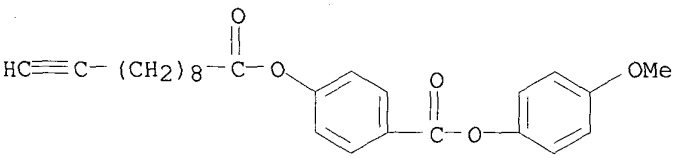
CRN 216219-47-5
CMF C25 H25 N O4



RN 216219-50-0 HCAPLUS
CN Benzoic acid, 4-[(1-oxo-10-undecynyl)oxy]-, 4-methoxyphenyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

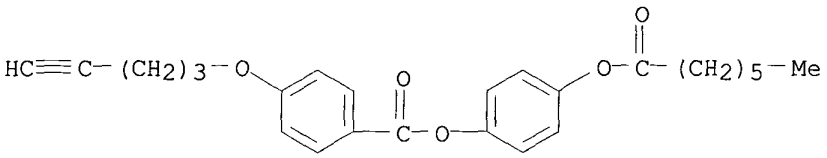
CRN 216219-48-6
CMF C25 H28 O5



RN 266370-81-4 HCAPLUS
CN Benzoic acid, 4-(4-pentynyloxy)-, 4-[(1-oxoheptyl)oxy]phenyl ester, homopolymer (9CI) (CA INDEX NAME)

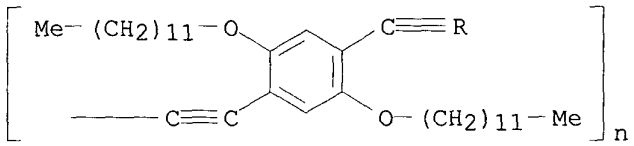
CM 1

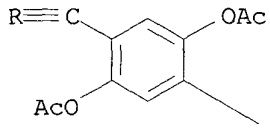
CRN 266370-80-3
CMF C25 H28 O5



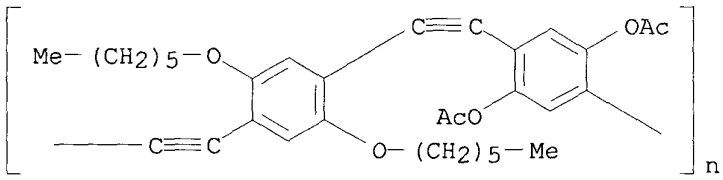
RE.CNT 49
RE
(1) Carter, P; Phys Rev B 1991, V43, P14478 HCAPLUS
(7) Ge, J; Macromolecules 1997, V30, P6498 HCAPLUS
(8) Higashimura, T; Polym J 1985, V17, P393 HCAPLUS
(10) Kang, E; Appl Phys Lett 1982, V41, P1136 HCAPLUS
(11) Kang, E; J Polym Sci Polym Lett 1982, V20, P143 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L43 ANSWER 3 OF 11 HCAPLUS COPYRIGHT 2001 ACS
AN 1999:758068 HCAPLUS
DN 132:93729
TI Preparation of .pi.-**Conjugated** Polymers Composed of Hydroquinone, p-Benzoquinone, and p-Diacetoxyphenylene Units. Optical and Redox Properties of the Polymers
AU Yamamoto, Takakazu; Kimura, Tohru; Shiraishi, Kouichi
CS Research Laboratory of Resources Utilization, Tokyo Institute of Technology, Midori-ku, Yokohama, 226-8503, Japan
SO Macromolecules (1999), 32(26), 8886-8896
CODEN: MAMOBX; ISSN: 0024-9297
PB American Chemical Society
DT Journal
LA English
AB .pi.-**Conjugated** poly(hydroquinone)s and poly(p-benzoquinone)s were prepd., and their optical properties and electrochem. redox response were studied. The poly(hydroquinone-2,5-diyl), PPP-2,5-OH, with a wt.-av. **mol**. wt. of 8500 (detd. by light scattering method) was sol. in DMF. The .pi.-.pi.* absorption peak of hydroquinone at 296 nm is shifted to 345 nm in PPP-2,5-OH and this polymer underwent two-step electrochem. oxidn. at about 0.5 and 0.8 V vs. Ag/Ag+. Poly(p-hydroquinone) with acetylenic main chain was also prepd.; the polymer has electrochem. oxidn. with oxidn. potential at about 1.0 V vs. Ag/Ag+. Optical and x-ray diffraction data of the polymers and their precursor polymers suggest stacking of the polymer **mols**.
IT **254116-74-0P 254116-76-2P 254116-78-4P 254116-80-8P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and redox electrochem. and optical properties of .pi.-**conjugated** polymers contg. hydroquinone and p-benzoquinone and p-diacetoxyphenylene units)
RN 254116-74-0 HCAPLUS
CN
Poly[[2,5-bis(acetyloxy)-1,4-phenylene]-1,2-ethynediyl[2,5-bis(dodecyloxy)-1,4-phenylene]-1,2-ethynediyl] (9CI) (CA INDEX NAME)

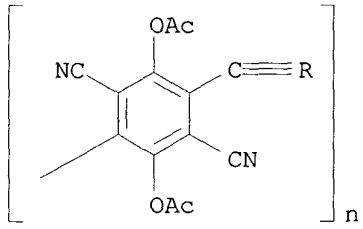


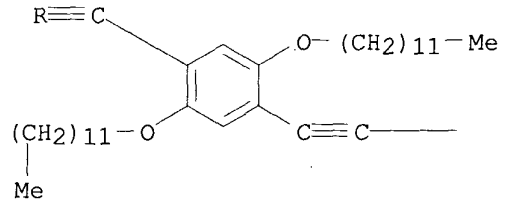


RN 254116-76-2 HCAPLUS
CN Poly[[2,5-bis(acetyloxy)-1,4-phenylene]-1,2-ethynediyl[2,5-bis(hexyloxy)-1,4-phenylene]-1,2-ethynediyl] (9CI) (CA INDEX NAME)



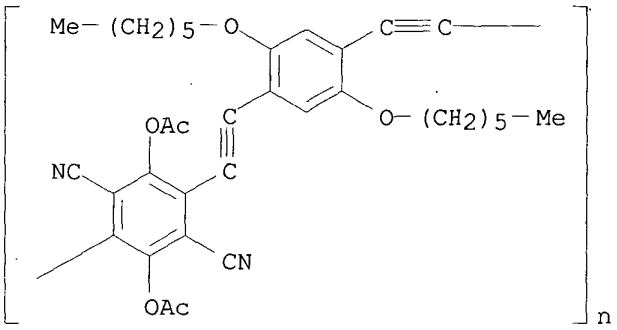
RN 254116-78-4 HCAPLUS
CN Poly[[2,5-bis(acetyloxy)-3,6-dicyano-1,4-phenylene]-1,2-ethynediyl[2,5-bis(dodecyloxy)-1,4-phenylene]-1,2-ethynediyl] (9CI) (CA INDEX NAME)





RN 254116-80-8 HCAPLUS

CN Poly[[2,5-bis(acetyloxy)-3,6-dicyano-1,4-phenylene]-1,2-ethynediyl[2,5-bis(hexyloxy)-1,4-phenylene]-1,2-ethynediyl] (9CI) (CA INDEX NAME)



RE.CNT 107
RE
(1) Anon; US 4521589 1985 HCAPLUS
(13) Anson, F; J Am Chem Soc 1991, V113, P1922 HCAPLUS
(14) Arai, G; Electroanal Chem 1996, V410, P173 HCAPLUS
(15) Audebert, P; J Electroanal Chem 1987, V238, P183 HCAPLUS
(16) Bauld, N; Tetrahedron Lett 1962, P859 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L43 ANSWER 4 OF 11 HCAPLUS COPYRIGHT 2001 ACS
AN 1996:288327 HCAPLUS
DN 124:318777
TI Flexible and impact-resistant liquid crystalline polyester compositions
IN Aizawa, Katsumi; Ootsuka, Yoshihiro
PA Daicel Chem, Japan
SO Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 08041297	A2	19960213	JP 1994-180334	19940801

AB The title compns. comprise 70-99 parts polyesters comprising repeating units of [COR1O] 20-80, [COR2CO] (I) 10-40, and [OR3O] (II) 10-40 **mol**% (R1 = divalent C6-15 arom. residues; R2, R3 = C6-15 divalent arom. residue, C4-20 divalent alicyclic residue, C1-20 divalent aliph. residue; I/II molar ratio 1), and 1-30 parts partially hydrogenated block copolymers comprising arom. vinyl segments and **conjugated** diene segments, whose double bonds are epoxidized. Thus, 4-acetoxybenzoic acid 0.80, terephthalic acid 0.60, and 4,4'-diacetoxyisopropylidenediphenyl 0.60 **mol** were polymd., kneaded (92 parts polyester) and pelletized with 8 parts epoxy-modified block copolymer (epoxy equiv. 5730) prepd. by treating Tuftec H 1041 with AcO2H. The compn. was injection molded to give test pieces showing elongation 82% and notched Izod impact strength 30 kg-cm/cm.
IT **64042-70-2P**

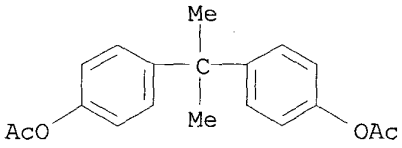
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); PREP (Preparation); USES (Uses)
(flexible liq. cryst. polyester compns. contg. epoxidized hydrogenated SBR)

RN 64042-70-2 HCAPLUS

CN 1,4-Benzenedicarboxylic acid, polymer with 4-(acetyloxy)benzoic acid and (1-methylethylidene)di-4,1-phenylene diacetate (9CI) (CA INDEX NAME)

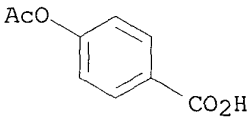
CM 1

CRN 10192-62-8
CMF C19 H20 O4



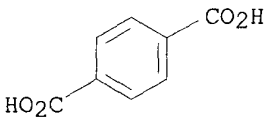
CM 2

CRN 2345-34-8
CMF C9 H8 O4



CM 3

CRN 100-21-0
CMF C8 H6 O4

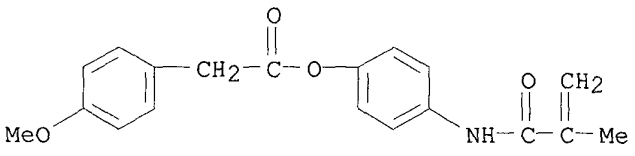


L43 ANSWER 5 OF 11 HCAPLUS COPYRIGHT 2001 ACS
AN 1995:448991 HCAPLUS
DN 122:322403
TI Antinociceptive and antipyretic properties of a new **conjugated** ibuprofen-methacrylic polymeric controlled delivery system
AU Liso, P. A.; Rebuelta, M.; San Roman, J.; Gallardo, A.; Villar, A. M.

CS Pharmacology Department, Facultad de Farmacia, Universidad Complutense, pza. Ramon y Cajal, 28040, Madrid, Spain
SO J. Controlled Release (1995), 33(3), 429-36
CODEN: JCREEC; ISSN: 0168-3659
DT Journal
LA English
AB Antinociceptive and antipyretic properties of a biocompatible polymer, poly(N-(4-(2-(4-isobutylphenyl) propionyloxy)phenyl)methacrylamide) (PolyMIA) as a carrier **drug** was investigated. This new polyacrylic compd. and its monomeric form (MIA) were prepd. by coupling methacrylic acid, p-aminophenol and ibuprofen (IB) by esterification and amidation and finally by free radical polymn. of the monomeric acrylic deriv. in soln., using a conventional free-radical initiator. Plasma levels were detd. by GC after the administration of IB, MIA and PolyMIA in mice. PolyMIA acts as a controlled IB delivery system. Practically const. plasma levels of IB, about 20 .mu.g/mL, were obtained at least for 6 h after the i.p. administration of PolyMIA. Antinociceptive in vivo tests confirm the existence of a prolonged release of IB from the macromol. systems. PolyMIA shows a time-extended activity and equal or even higher intensity of antinociceptive effects than that of free IB. In antipyretic test, PolyMIA was the only compd. which increased its activity beyond the sixth hour of treatment (84.8%, $p<0.01$ vs. control and vs. IB), doubling the traditional IB activity. The appearance of pharmacol. activity of PolyMIA in a very short time after administration, seems to indicate that the system could be active in its polymeric form, since the hydrolytic behavior followed in vitro in alk. medium, showed a rate of cleavage of the side IB residue much lower than that indicated by the effects obsd. in vivo.
IT **143121-97-5**
RL: BPR (Biological process); RCT (Reactant); THU (Therapeutic use); **BIOL (Biological study)**; PROC (Process); USES (Uses)
(antinociceptive and antipyretic activities of ibuprofen-methacrylic polymeric controlled delivery systems)
RN 143121-97-5 HCAPLUS
CN Benzeneacetic acid, 4-methoxy-, 4-[(2-methyl-1-oxo-2-propenyl)amino]phenyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 143121-95-3
CMF C19 H19 N O4



L43 ANSWER 6 OF 11 HCAPLUS COPYRIGHT 2001 ACS
AN 1991:537031 HCAPLUS
DN 115:137031
TI **Conjugated** high-**molecular** weight polymers
IN Miyabayashi, Mitsutaka; Iimura, Kazuyoshi; Ujiie, Seiji
PA Mitsubishi Petrochemical Co., Ltd., Japan
SO Eur. Pat. Appl., 22 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

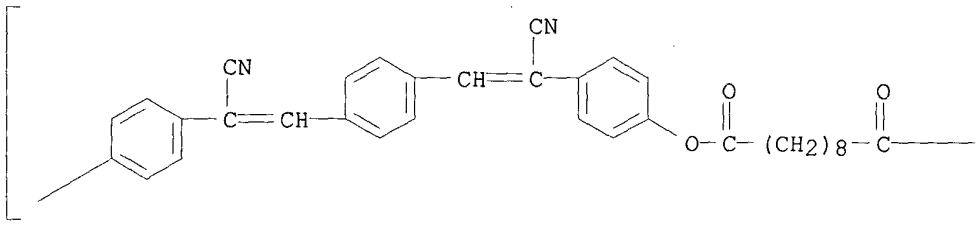
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 427962	A2	19910522	EP 1990-119608	19901012
	EP 427962	A3	19910828		
	R: DE, FR, GB				
	JP 03126724	A2	19910529	JP 1989-264999	19891013
	JP 2979035	B2	19991115		
	JP 03126717	A2	19910529	JP 1989-265000	19891013
	US 5102973	A	19920407	US 1990-593739	19901005
PRAI	JP 1989-264999		19891013		
	JP 1989-265000		19891013		

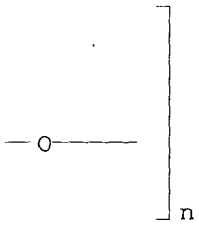
AB The title polymers (**mol**. wt. .gtoreq.1000) comprise the units Z1Z2(CR1:CR2Z2)mZ3(CH2)n [m = 2-10; n = 1-23; Z1, Z3 = NHCO and CONH, CONH and NHCO, CO2 and OCO, or OCO and CO2, resp.; Z2 = (substituted) arylene; R1, R2 = H, CN, NO2] and are liq.-cryst. and fluorescent. A liq.-cryst. copolymer of sebacic acid and HO-p-C6H4C(CN):CH-p-C6H4CH:C(CN)-p-C6H4OH had a fluorescence peak at .apprx.470 nm.

IT **136065-30-0P**
RL: PREP (Preparation)
(fluorescent, liq.-cryst., manuf. of)

RN 136065-30-0 HCAPLUS
CN Poly[oxy(1,10-dioxo-1,10-decanediyl)oxy-1,4-phenylene(1-cyano-1,2-ethenediyl)-1,4-phenylene(2-cyano-1,2-ethenediyl)-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A





L43 ANSWER 7 OF 11 HCAPLUS COPYRIGHT 2001 ACS
AN 1991:208053 HCAPLUS
DN 114:208053
TI Manufacture of (meth)acrylate copolymers useful in nonlinear optics and Langmuir-Blodgett films
IN Licht, Ulrike; Fuchs, Harald; Funhoff, Dirk; Schrepp, Wolfgang; Schupp, Hans
PA BASF A.-G., Fed. Rep. Ger.
SO Ger. Offen., 12 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3918016	A1	19901206	DE 1989-3918016	19890602
	WO 9015087	A1	19901213	WO 1990-EP866	19900530
	W: AU, CA, JP, KR, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, IT, LU, NL, SE				
	AU 9057366	A1	19910107	AU 1990-57366	19900530
	EP 474713	A1	19920318	EP 1990-908522	19900530
	EP 474713	B1	19940907		
	R: BE, CH, DE, DK, FR, GB, IT, LI, NL, SE				
	JP 04507426	T2	19921224	JP 1990-508357	19900530
	US 5204178	A	19930420	US 1991-784427	19911112
PRAI	DE 1989-3918016		19890602		
	WO 1990-EP866		19900530		

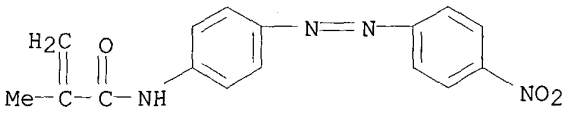
AB The title copolymers contain C10-30 alkyl (meth)acrylates and the monomers CH2:CO(R)COXYZ (R = H, Me; X = direct bond or spacer group; Y = electron donating divalent group; Z = noncentrosym., easily polarizable, **conjugated** .pi.-electron group bearing .gtoreq.1 terminal electron acceptor group) having 2nd-order nonlinear optical properties in 0.5-5:1 **mol** ratio. Thus, AIBN-initiated polymn. of 0.4 g N-[4'-[(4-nitrophenyl)azo]phenyl]methacrylamide with 0.87 g octadecyl methacrylate in PhMe gave 0.3 g copolymer (no.-av. **mol**.wt. 5500) which was useful in nonlinear optical materials and Langmuir-Blodgett films.

IT **133547-16-7P**
RL: IMF (Industrial manufacture); PREP (Preparation)
(manuf. of, for nonlinear optics and Langmuir-Blodgett films)
RN 133547-16-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, octadecyl ester, polymer with 2-methyl-N-[4-[(4-nitrophenyl)azo]phenyl]-2-propenamide (9CI) (CA INDEX NAME)

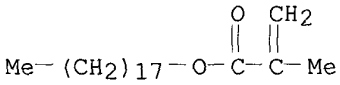
CM 1

CRN 58142-15-7
CMF C16 H14 N4 O3



CM 2

CRN 32360-05-7
CMF C22 H42 O2

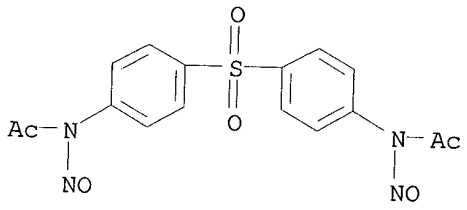


L43 ANSWER 8 OF 11 HCAPLUS COPYRIGHT 2001 ACS
AN 1980:515217 HCAPLUS
DN 93:115217
TI Synthesis and properties of copolymers having **polyconjugated** blocks in the **macromolecules**. III. Thermal behavior of polyisoprene containing polyazophenylene fragments in the main chains
AU Berlin, A. A.; Gerasimov, B. G.; Ivanov, A. A.; Maslyukov, A. P.; Sel'skaya, O. G.; Belova, L. I.
CS Inst. Chem. Phys., Moscow, USSR
SO J. Macromol. Sci., Chem. (1980), A14(7), 991-8
CODEN: JMCHBD; ISSN: 0022-233X
DT Journal
LA English
AB The kinetics of thermal and thermooxidative degrdn. of isoprene polymers contg. Z(C6H4-p)2 and -C6H4ZC6H4N:N- units [Z = direct bond, O, CH2, or SO2], prepd. from isoprene and Z[C6H4N(NO)Ac]2, were studied in air and Ar
at 300-450.degree.. The activation energy of degrdn. is 74 and 90 kJ/**mol**, resp. The initial rates of wt. losses at 300.degree. are lower in the presence of smaller amts. of polyazophenylene units. Polyazophenylene fragments contg. CH2 groups were the most active in inhibiting thermal oxidn. because of the intramol. synergism of reaction of peroxy radicals with mobile H atoms of the CH2 and decompn. of hydroperoxides by **polyconjugated** blocks.
IT **63322-31-6 63322-32-7 63354-88-1**
RL: RCT (Reactant)
(thermal oxidn. of, kinetics of)

RN 63322-31-6 HCAPLUS
CN Acetamide, N,N'-(sulfonyldi-4,1-phenylene)bis[N-nitroso-, polymer with 2-methyl-1,3-butadiene (9CI) (CA INDEX NAME)

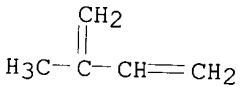
CM 1

CRN 63317-81-7
CMF C16 H14 N4 O6 S



CM 2

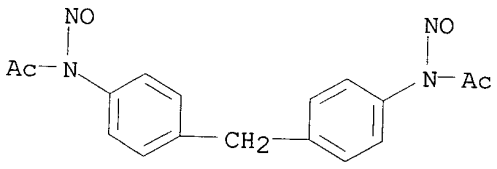
CRN 78-79-5
CMF C5 H8



RN 63322-32-7 HCAPLUS
CN Acetamide, N,N'-(methylenedi-4,1-phenylene)bis[N-nitroso-, polymer with 2-methyl-1,3-butadiene (9CI) (CA INDEX NAME)

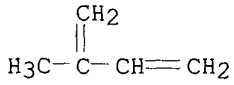
CM 1

CRN 63317-80-6
CMF C17 H16 N4 O4



CM 2

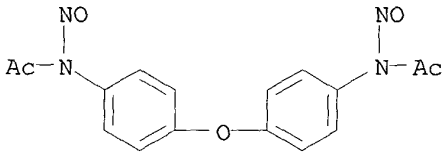
CRN 78-79-5
CMF C5 H8



RN 63354-88-1 HCAPLUS
CN Acetamide, N,N'-(oxydi-4,1-phenylene)bis[N-nitroso-, polymer with 2-methyl-1,3-butadiene (9CI) (CA INDEX NAME)

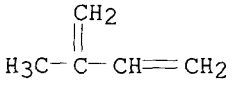
CM 1

CRN 63317-79-3
CMF C16 H14 N4 O5

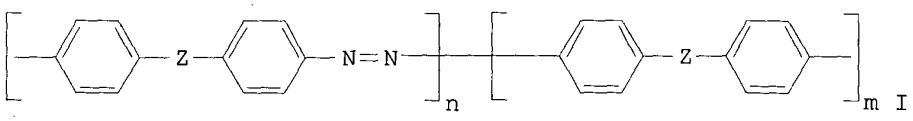


CM 2

CRN 78-79-5
CMF C5 H8



L43 ANSWER 9 OF 11 HCAPLUS COPYRIGHT 2001 ACS
AN 1978:563990 HCAPLUS
DN 89:163990
TI Synthesis and properties of poly(azophenylenes) of various structure
AU Berlin, A. A.; Maslyukov, A. P.; Gerasimov, B. G.; Ivanov, A. A.
CS Mosk. Inst. Tonkoi Khim. Tekhnol., Moscow, USSR
SO Vysokomol. Soedin., Ser. A (1978), 20(8), 1772-80
CODEN: VYSAAF; ISSN: 0507-5475
DT Journal
LA Russian
GI



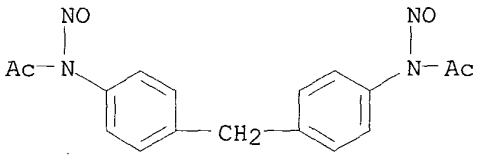
AB Poly(azophenylenes) I (Z = CH2, O, SO2, S) were obtained by decompn. of Z[C6H4[N(NO)Ac]-p-]2 in isooctane- or cyclohexane- aq. Na alkanesulfonate emulsions at 40.degree.. The structures of I were established by elemental anal., and IR, electronic, and ESR spectroscopy. I had high oxidative thermal stability, although lower than that of the corresponding polymer derived from p-[Ac(NO)N]C6H4C6H4[N(NO)Ac]-p. The low solubilities of I were ascribed to the presence in their chains of **conjugated** blocks. The presence of an aq. phase in the synthesis of I facilitated the removal of acetoxy radicals from the reaction zone and increased **mol**. wts. of the resulting polymers.

IT **67937-23-9P 67937-24-0P 67937-25-1P 67937-27-3P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and structure and properties of)

RN 67937-23-9 HCAPLUS
CN Acetamide, N,N'-(methylenedi-4,1-phenylene)bis[N-nitroso-, homopolymer (9CI) (CA INDEX NAME)

CM 1

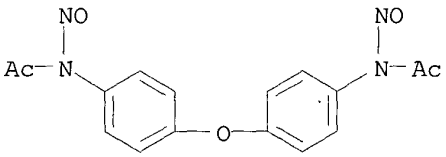
CRN 63317-80-6
CMF C17 H16 N4 O4



RN 67937-24-0 HCAPLUS
CN Acetamide, N,N'-(oxydi-4,1-phenylene)bis[N-nitroso-, homopolymer (9CI) (CA INDEX NAME)

CM 1

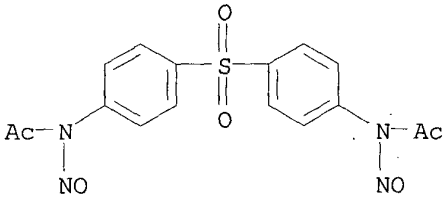
CRN 63317-79-3
CMF C16 H14 N4 O5



RN 67937-25-1 HCAPLUS
CN Acetamide, N,N'-(sulfonyldi-4,1-phenylene)bis[N-nitroso-, homopolymer (9CI) (CA INDEX NAME)

CM 1

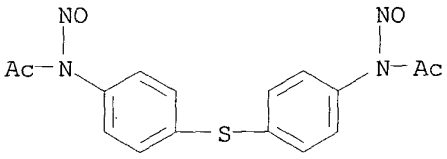
CRN 63317-81-7
CMF C16 H14 N4 O6 S



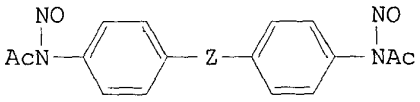
RN 67937-27-3 HCAPLUS
CN Acetamide, N,N'-(thiodi-4,1-phenylene)bis[N-nitroso-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 67937-26-2
CMF C16 H14 N4 O4 S



L43 ANSWER 10 OF 11 HCAPLUS COPYRIGHT 2001 ACS
AN 1977:602794 HCAPLUS
DN 87:202794
TI Synthesis and properties of copolymers having **polyconjugated** blocks in the **macromolecules**. II. The use of aromatic N,N'-bis(nitrosoacetyl)diamines for the synthesis of copolymers and polyazophenylene
AU Berlin, A. A.; Gerasimov, B. G.; Ivanov, A. A.; Masliukov, A. P.; Sheludchenko, N. Zh.
CS Inst. Chem., Moscow, USSR
SO J. Macromol. Sci., Chem. (1977), A11(4), 821-43
CODEN: JMCHBD
DT Journal
LA English
GI



I

AB Arom. N,N'-bis(nitrosoacetyl)diamines I (Z = direct bond) (II) [61444-52-8], I (Z = O) [63317-79-3], I (Z = CH2) [63317-80-6], and I (Z = SO2) [63317-81-7] were emulsion copolymd. with isoprene to give copolymer rubbers having **polyconjugated** blocks. For example, emulsion copolymn. of II (1.25-10%) with isoprene at 40.degree. in the absence of air gave a black-violet elastic polymer (III) [63322-34-9] in 9.6-20.7% yield. III and other similar copolymers all contained paramagnetic centers at concns. of 1016 spin/g; the shape of the EPR curve was similar to that of II homopolymer [63322-33-8]. The amt. of **polyconjugated** block in the copolymers is 7-25% even though the initial concn. of II is only 1.25-10%. Copolymer soly. drops sharply with increasing block content; with >20% **polyconjugated** content the polymers are practically insol. in common org. solvents. The formation of **polyconjugated** block aggregates was confirmed by anomolous behavior of copolymer solns. Viscosity curves of dil. copolymer solns. showed a max. at concns. of 0.25-0.35 g/dL. In the concn. range corresponding to a max. on the viscosity curves the absorption intensity of the copolymers does not follow the Lambert-Beer law, and this anomaly appears to be connected with partial dissocn. of the aggregates of **polyconjugated** blocks.

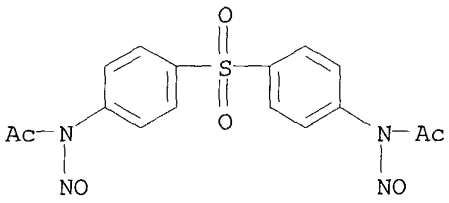
IT **63322-31-6P 63322-32-7P 63354-88-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(block, contg. **polyconjugated** segments, prepn. and properties of)

RN 63322-31-6 HCAPLUS

CN Acetamide, N,N'-(sulfonyldi-4,1-phenylene)bis[N-nitroso-, polymer with 2-methyl-1,3-butadiene (9CI) (CA INDEX NAME)

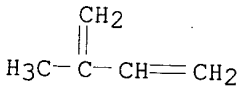
CM 1

CRN 63317-81-7
CMF C16 H14 N4 O6 S



CM 2

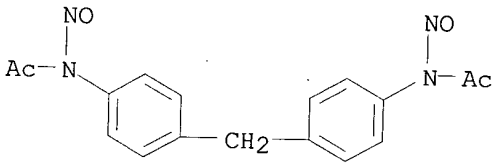
CRN 78-79-5
CMF C5 H8



RN 63322-32-7 HCAPLUS
CN Acetamide, N,N'-(methylenedi-4,1-phenylene)bis[N-nitroso-, polymer with 2-methyl-1,3-butadiene (9CI) (CA INDEX NAME)

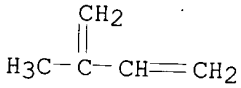
CM 1

CRN 63317-80-6
CMF C17 H16 N4 O4



CM 2

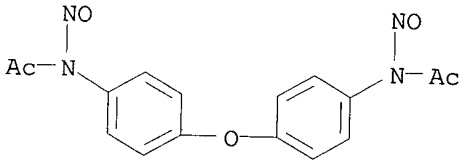
CRN 78-79-5
CMF C5 H8



RN 63354-88-1 HCAPLUS
CN Acetamide, N,N'-(oxydi-4,1-phenylene)bis[N-nitroso-, polymer with 2-methyl-1,3-butadiene (9CI) (CA INDEX NAME)

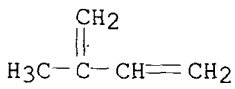
CM 1

CRN 63317-79-3
CMF C16 H14 N4 O5



CM 2

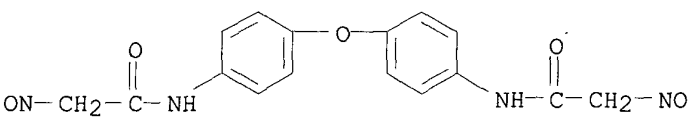
CRN 78-79-5
CMF C5 H8



L43 ANSWER 11 OF 11 HCAPLUS COPYRIGHT 2001 ACS
AN 1973:526892 HCAPLUS
DN 79:126892
TI Thermooxidative stability of copolymers having **polyconjugated** fragments in the main chain of **macromolecules**
AU Berlin, A. A.; Gerasimov, B. G.; Ivanov, A. A.
CS Inst. Fine Chem. Technol., Moscow, USSR
SO J. Polym. Sci., Polym. Symp. (1973), No. 40, 183-8
CODEN: JPYCAQ
DT Journal
LA English
AB The presence of **polyconjugated** polyazophenylene blocks in the macromol. chain of polyisoprene or polystyrene inhibited the oxidn. of the copolymers. The polymers were prepd by emulsion polymn. of isoprene [78-79-5] and styrene [100-42-5] with free radical decompn. products of arom. N,N'-bis(nitrosoacetylamine) compds. obtained from benzidine, 4,4'-diaminodiphenyl ether, 4,4'-diaminodiphenylmethane, and 4,4'-diaminodiphenyl sulfone. The inhibiting activity of the polyazophenylene blocks was greater than that of mixts. of the corresponding homopolymers. The oxidn. inhibition resulted from the compatibility of the **polyconjugated** blocks, the distribution in the polymer chain, and the increase in **conjugation** degree, due to intermol. interaction of the blocks.
IT **50828-46-1 50828-48-3 50828-50-7**
RL: USES (Uses)
(block, thermooxidative stability of)
RN 50828-46-1 HCAPLUS
CN Acetamide, N,N'-(oxydi-4,1-phenylene)bis[2-nitroso-, polymer with 2-methyl-1,3-butadiene (9CI) (CA INDEX NAME)

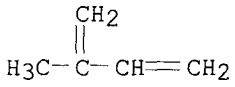
CM 1

CRN 50828-45-0
CMF C16 H14 N4 O5



CM 2

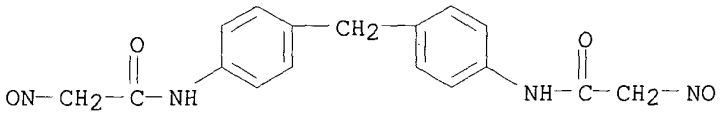
CRN 78-79-5
CMF C5 H8



RN 50828-48-3 HCAPLUS
CN Acetamide, N,N'-(methylenedi-4,1-phenylene)bis[2-nitroso-, polymer with 2-methyl-1,3-butadiene (9CI) (CA INDEX NAME)

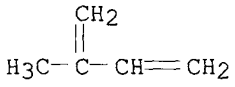
CM 1

CRN 50828-47-2
CMF C17 H16 N4 O4



CM 2

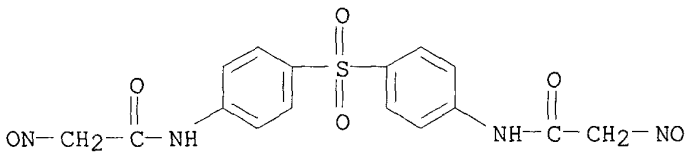
CRN 78-79-5
CMF C5 H8



RN 50828-50-7 HCAPLUS
CN Acetamide, N,N'-(sulfonyldi-4,1-phenylene)bis[2-nitroso-, polymer with 2-methyl-1,3-butadiene (9CI) (CA INDEX NAME)

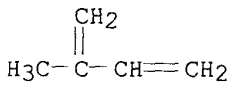
CM 1

CRN 50828-49-4
CMF C16 H14 N4 O6 S



CM 2

CRN 78-79-5
CMF C5 H8



Searched 3/26/03
602 organic based claims #1
No oligos

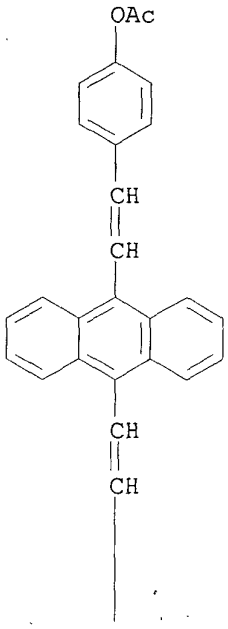
=> d bib abs hitstr l44 1-11

L44 ANSWER 1 OF 11 HCAPLUS COPYRIGHT 2001 ACS
AN 2000:646337 HCAPLUS
DN 133:335842
TI Synthesis and Structure-Property Relationships of Soluble Rigid-Flexible Copolyethers Containing Blue and Yellow Light Emitting Units
AU Konstandakopoulou, F. D.; Iconomopoulou, S. M.; Gravalos, K. G.; Kallitsis, J. K.
CS Department of Chemistry, University of Patras, Patras, GR 265 00, Greece
SO Chem. Mater. (2000), 12(10), 2957-2963
CODEN: CMATEX; ISSN: 0897-4756
PB American Chemical Society
DT Journal
LA English
AB A series of new rigid-flexible copolyethers contg. blue- and yellow-emitting **conjugated** segments have been synthesized. The thermal, mech., and optical properties of the polymers are controlled by the type of the comonomers, their ratio at the prepn. stage, and the length of the flexible spacer, as well as the structure of the blue monomer in the main chain. The polyethers were characterized by viscosimetry, thermal and mech. anal., NMR, and UV-vis and luminescence spectroscopy. The polymers obtained are sol. in common solvents, form free-standing films either from soln. casting or after melt pressing, and show good mech. properties. Regardless of the excitation wavelength, the polyethers show bright-yellow photoluminescence in soln., suggesting energy transfer from the blue to the yellow unit. In the solid state, the luminescence behavior is controlled by the monomer structure, the molar percentage of the comonomers, the length of the flexible spacer, and the excitation wavelength.
IT **251660-25-0P 304655-01-4P 304655-02-5P**
304655-03-6P 304655-04-7P 304655-05-8P
304655-06-9P 304655-07-0P 304655-08-1P
304655-09-2P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(sol. rigid-flexible copolyethers contg. blue and yellow light emitting units)
RN 251660-25-0 HCAPLUS
CN Phenol, 4,4'-(9,10-anthracenediyldi-2,1-ethenediyl)bis-, diacetate, polymer with 1,10-dibromodecane (9CI) (CA INDEX NAME)

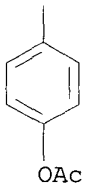
CM 1

CRN 251659-92-4
CMF C34 H26 O4

PAGE 1-A



PAGE 2-A



CM 2

CRN 4101-68-2
CMF C10 H20 Br2

$Br-(CH_2)_{10}-Br$

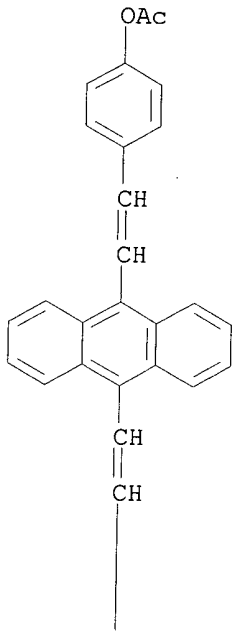
RN 304655-01-4 HCAPLUS
CN [1,1':4',1'':4'',1''':4''',1''''-Quinquephenyl]-4,4''''-diol, 2'',5''-bis(hexyloxy)-, diacetate, polymer with 9,10-anthracenediylbis(2,1-ethenediyl-4,1-phenylene) diacetate and 1,11-dibromoundecane (9CI) (CA

INDEX NAME)

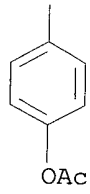
CM 1

CRN 251659-92-4
CMF C34 H26 O4

PAGE 1-A



PAGE 2-A



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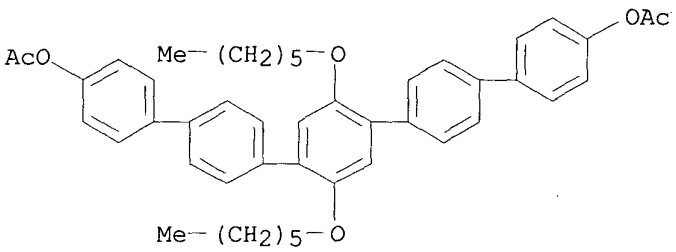


CM 3

CRN 16696-65-4
CMF C11 H22 Br2

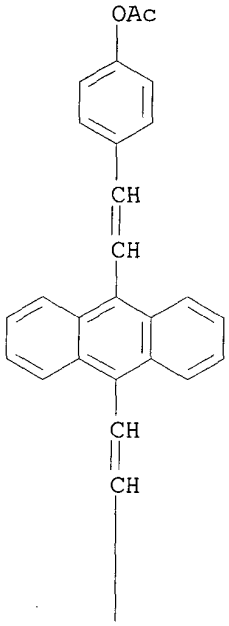
Br—(CH2)11—Br

RN 304655-02-5 HCAPLUS
CN [1,1':4',1'':4'',1''':4''',1'''':4'''',1'''''-Quinquephenyl]-4,4''''-diol, 2'',5''-bis(hexyloxy)-, diacetate, polymer with 9,10-anthracenediylbis(2,1-ethenediyl-4,1-phenylene) diacetate and 1,10-dibromodecane (9CI) (CA INDEX NAME)

CM 1

CRN 251659-92-4
CMF C34 H26 O4

PAGE 1-A



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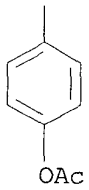

CM 2

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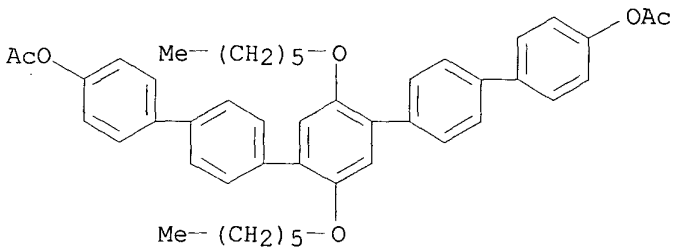


CM 3

CRN 4101-68-2
CMF C10 H20 Br2

RN 304655-03-6 HCAPLUS
CN [1,1'-Biphenyl]-2,5-diol, 4'-(2-phenylethenyl)-, diacetate, polymer with 9,10-anthracenediylbis(2,1-ethenediyl-4,1-phenylene) diacetate and 1,11-dibromoundecane (9CI) (CA INDEX NAME)

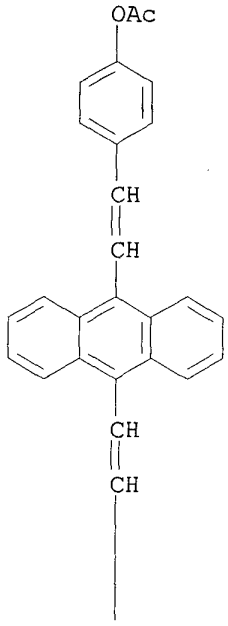
CM 1

CRN 304655-00-3
CMF C24 H20 O4

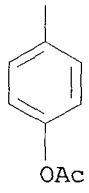
CM 2

CRN 251659-92-4
CMF C34 H26 O4

PAGE 1-A



PAGE 2-A



CM 3

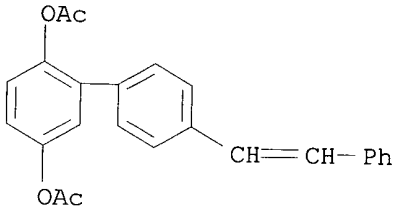
CRN 16696-65-4
CMF C11 H22 Br2

$Br-(CH_2)_{11}-Br$

RN 304655-04-7 HCAPLUS
CN [1,1'-Biphenyl]-2,5-diol, 4'-(2-phenylethenyl)-, diacetate, polymer with 9,10-anthracenediylbis(2,1-ethenediyl-4,1-phenylene) diacetate and 1,8-dibromooctane (9CI) (CA INDEX NAME)

CM 1

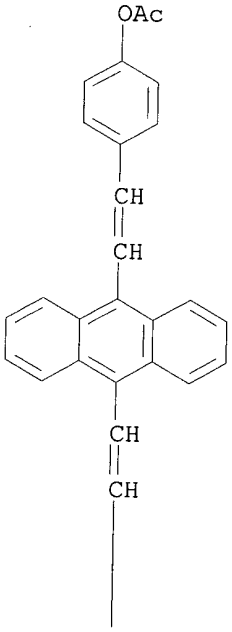
CRN 304655-00-3
CMF C24 H20 O4

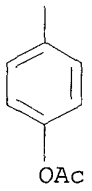


CM 2

CRN 251659-92-4
CMF C34 H26 O4

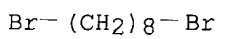
PAGE 1-A





CM 3

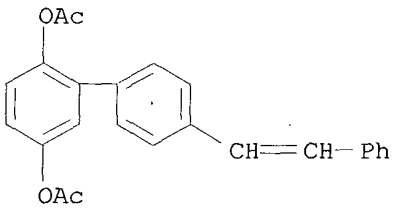
CRN 4549-32-0
CMF C8 H16 Br2



RN 304655-05-8 HCAPLUS
CN [1,1'-Biphenyl]-2,5-diol, 4'-(2-phenylethenyl)-, diacetate, polymer with 9,10-anthracenediylbis(2,1-ethenediyl-4,1-phenylene) diacetate and 1,7-dibromoheptane (9CI) (CA INDEX NAME)

CM 1

CRN 304655-00-3
CMF C24 H20 O4



CM 2

CRN 251659-92-4
CMF C34 H26 O4

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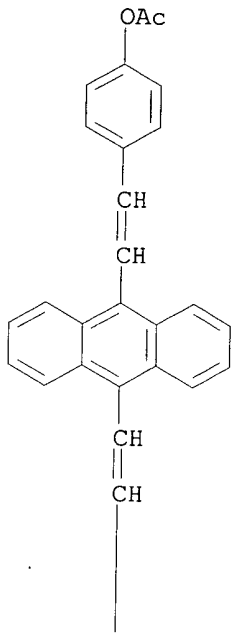
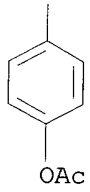


PAGE 2-A



CM 3

CRN 4549-31-9
CMF C7 H14 Br2

$Br-(CH_2)_7-Br$

RN 304655-06-9 HCAPLUS
CN Phenol, 4,4'-(9,10-anthracenediyldi-2,1-ethenediyl)bis-, diacetate, polymer with 1,7-dibromoheptane and 1,3-phenylenebis(2,1-ethenediyl-4,1-phenylene) diacetate (9CI) (CA INDEX NAME)

CM 1

CRN 251659-92-4
CMF C34 H26 O4

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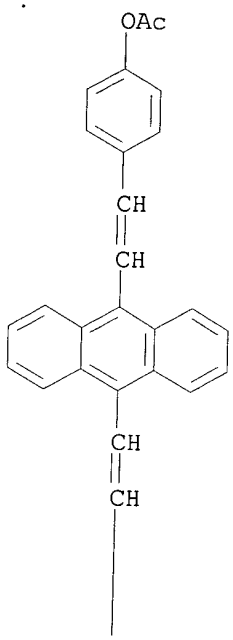

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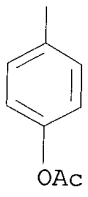
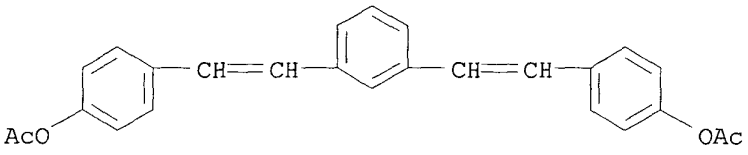


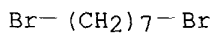
CM 2

CRN 100501-74-4
CMF C26 H22 O4



CM 3

CRN 4549-31-9
CMF C7 H14 Br2



RN 304655-07-0 HCAPLUS
CN Phenol, 4,4'-(9,10-anthracenediyldi-2,1-ethenediyl)bis-, diacetate, polymer with 1,8-dibromooctane and 1,3-phenylenebis(2,1-ethenediyl-4,1-phenylene) diacetate (9CI) (CA INDEX NAME)

CM 1

CRN 251659-92-4
CMF C34 H26 O4

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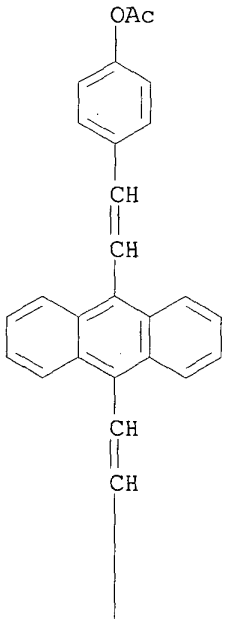
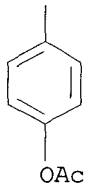
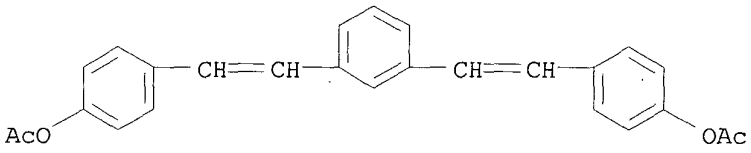




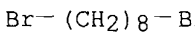
CM 2

CRN 100501-74-4
CMF C26 H22 O4



CM 3

CRN 4549-32-0
CMF C8 H16 Br2



RN 304655-08-1 HCAPLUS
CN Phenol, 4,4'-(9,10-anthracenediyldi-2,1-ethenediyl)bis-, diacetate, polymer with 1,10-dibromodecane and 1,3-phenylenebis(2,1-ethenediyl-4,1-phenylene) diacetate (9CI) (CA INDEX NAME)

CM 1

CRN 251659-92-4
CMF C34 H26 O4

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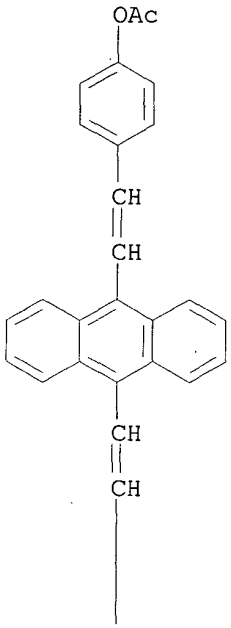

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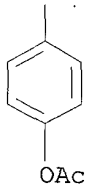
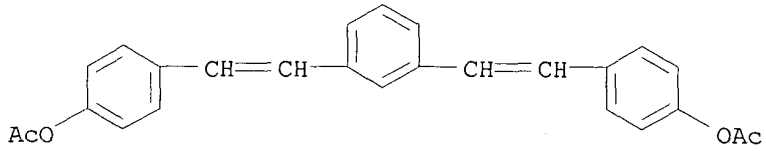


CM 2

CRN 100501-74-4
CMF C26 H22 O4



CM 3

CRN 4101-68-2
CMF C10 H20 Br2

$Br-(CH_2)_{10}-Br$

RN 304655-09-2 HCAPLUS
CN Phenol, 4,4'-(9,10-anthracenediyldi-2,1-ethenediyl)bis-, diacetate, polymer with 1,11-dibromoundecane and 1,3-phenylenebis(2,1-ethenediyl-4,1-phenylene) diacetate (9CI) (CA INDEX NAME)

CM 1

CRN 251659-92-4
CMF C34 H26 O4

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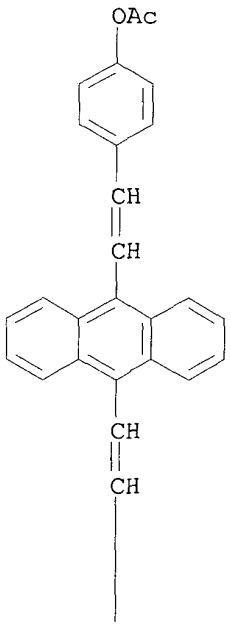

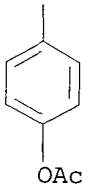

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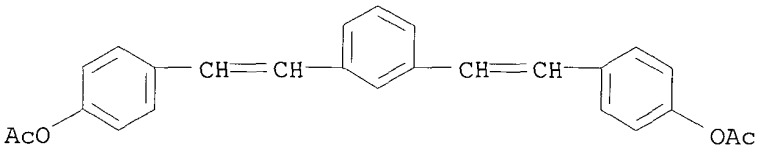
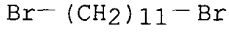
CRN 100501-74-4
CMF C26 H22 O4



CM 3

CRN 16696-65-4
CMF C11 H22 Br2



RE.CNT 50
RE
(1) Berggren, M; Nature 1994, V372, P444 HCAPLUS
(2) Braun, D; J Appl Phys Lett 1991, V58, P1982 HCAPLUS
(4) Burn, P; Nature 1992, V356, P47 HCAPLUS
(5) Burroughes, J; Nature 1990, V347, P539 HCAPLUS
(6) Chung, S; Polymer 1999, V40, P1943 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L44 ANSWER 2 OF 11 HCAPLUS COPYRIGHT 2001 ACS
AN 1999:365803 HCAPLUS
DN 131:37883
TI UV-sensitive liquid crystal orientation agent comprising **conjugated** enone-branched polymer
IN Matsuki, Yasuo; Makita, Minoru; Kimura, Shinichi; Kimura, Masayuki; Nakata, Shoichi; Takeuchi, Yasumasa
PA JSR Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DT Patent

LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11152475	A2	19990608	JP 1997-335092	19971119

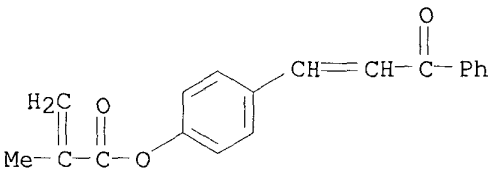
AB Claimed agent contains a polymer having .gtoreq.1 structure of P1CH:CHCOQ1 and/or R2CH:CHCOQ2 (Q1, Q2 = monovalent arom. group; P1 = bivalent arom. group; P2 = trivalent arom. group). The agent forms a heat-resistant orientation film and is useful for liq. crystal displays.

IT **32593-06-9P 226920-41-8P**
RL: DEV (Device component use); IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(liq. crystal orientation agent comprising **conjugated** enone-branched polymer with good heat resistance)

RN 32593-06-9 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 4-(3-oxo-3-phenyl-1-propenyl)phenyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

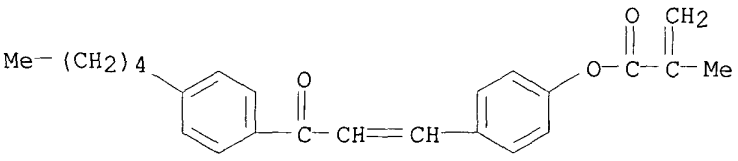
CRN 36452-05-8
CMF C19 H16 O3



RN 226920-41-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 4-[3-oxo-3-(4-pentylphenyl)-1-propenyl]phenyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 226920-40-7
CMF C24 H26 O3



L44 ANSWER 3 OF 11 HCAPLUS COPYRIGHT 2001 ACS
AN 1997:403217 HCAPLUS
DN 127:81838

TI Poly(1,2-phenylenevinylene)s Bearing Nitronyl Nitroxide and Galvinoxyl at the 4-Position: .pi.-**Conjugated** and Non-Kekul.acte.e-Type Polyradicals with a Triplet Ground State

AU Nishide, Hiroyuki; Hozumi, Yasuhiro; Nii, Takeshi; Tsuchida, Eishun
CS Department of Polymer Chemistry, Waseda University, Tokyo, 169, Japan

SO Macromolecules (1997), 30(14), 3986-3991
CODEN: MAMOBX; ISSN: 0024-9297
PB American Chemical Society
DT Journal
LA English

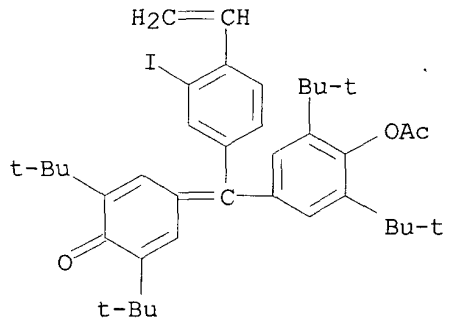
AB Poly[4-(4',4',5',5'-tetramethyl-3'-oxido-1'-oxylimidazolinium-2'-yl)-1,2-phenylenevinylene] and poly[4-[(3,5-di-tert-butyl-4-oxyphenyl)(3,5-di-tert-butyl-4-oxocyclohexa-2,5-diene-1-ylidene)methyl]-1,2-phenylenevinylene] were synthesized via polymn. of 2-bromo-4-[1',3'-bis(tert-butyldimethylsiloxy)-4',4',5',5'-tetramethylimidazolin-2'-yl]styrene and 2-iodo-4-[(3,5-di-tert-butyl-4-acetoxyphenyl)(3,5-di-tert-butyl-4-oxocyclohexa-2,5-dien-1-ylidene)methyl]styrene, resp., using a palladium catalyst. Their spin (radical) concn. could be increased beyond 0.9 per M monomer unit, and they were stable even in air at room temp. The polyradicals satisfied an alternant but non-Kekul.acte.e-type .pi.-**conjugated** structure and displayed a triplet ground state or an intramacromol. ferromagnetic spin coupling in the SQUID magnetization measurement.

IT **191665-71-1P 191665-72-2P**
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(polyradical formation in and magnetic properties of nitronyl nitroxide- and galvinoxyl-contg. polyphenylenevinylenes)

RN 191665-71-1 HCAPLUS
CN 2,5-Cyclohexadien-1-one, 4-[[4-(acetyloxy)-3,5-bis(1,1-dimethylethyl)phenyl](4-ethenyl-3-iodophenyl)methylene]-2,6-bis(1,1-dimethylethyl)-, homopolymer (9CI) (CA INDEX NAME)

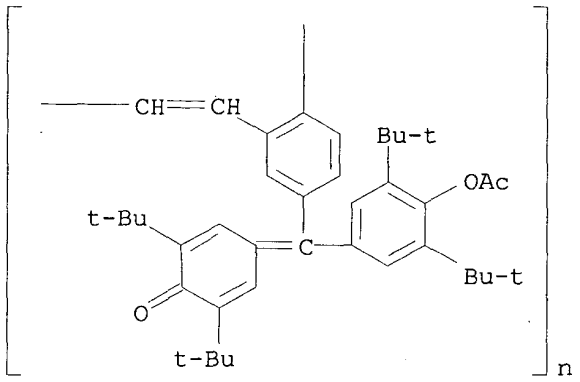
CM 1

CRN 191665-62-0
CMF C39 H49 I O3



RN 191665-72-2 HCAPLUS

CN Poly[[4-[[4-(acetyloxy)-3,5-bis(1,1-dimethylethyl)phenyl][3,5-bis(1,1-dimethylethyl)-4-oxo-2,5-cyclohexadien-1-ylidene]methyl]-1,2-phenylene]-1,2-ethenediyl], (E)- (9CI) (CA INDEX NAME)

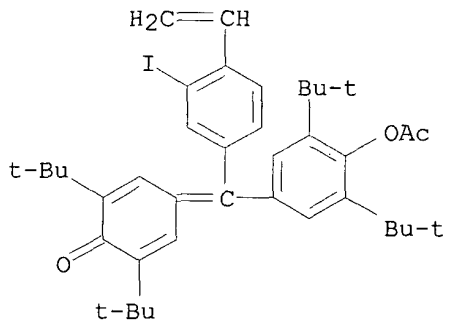


IT **191665-71-1DP**, deacetylated, oxidized **191665-72-2DP**, deacetylated, oxidized
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(polyradical formation in and magnetic properties of nitronyl nitroxide- and galvinoxyl-contg. polyphenylenevinylenes)

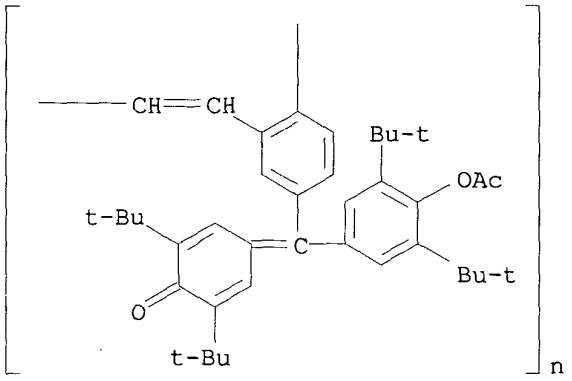
RN 191665-71-1 HCAPLUS
CN 2,5-Cyclohexadien-1-one, 4-[[4-(acetyloxy)-3,5-bis(1,1-dimethylethyl)phenyl](4-ethenyl-3-iodophenyl)methylene]-2,6-bis(1,1-dimethylethyl)-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 191665-62-0
CMF C39 H49 I O3



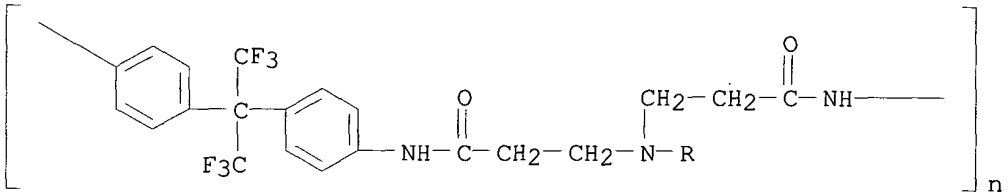
RN 191665-72-2 HCAPLUS
CN Poly[[4-[[4-(acetyloxy)-3,5-bis(1,1-dimethylethyl)phenyl][3,5-bis(1,1-dimethylethyl)-4-oxo-2,5-cyclohexadien-1-ylidene]methyl]-1,2-phenylene]-1,2-ethenediyl], (E)- (9CI) (CA INDEX NAME)

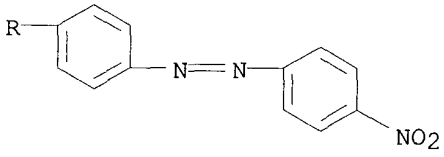


L44 ANSWER 4 OF 11 HCAPLUS COPYRIGHT 2001 ACS
AN 1997:174534 HCAPLUS
DN 126:178739
TI Nonlinear optically active compound and polymer nonlinear optical material
with improved heat resistance
IN Ogata, Shinichi; Watanabe, Osamu; Okada, Akane
PA Toyoda Chuo Kenkyusho Kk, Japan
SO Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 08334794	A2	19961217	JP 1995-140825	19950607

AB The compd. comprises (A) a nonlinear optically active component having .gtoreq.1 electron-donating group bonded with an electron-attractive group in a .pi.-electron **conjugated** system and (B) a pair of carboxylic groups for introduction of the nonlinear component into a polymer backbone. The polymer material comprises a backbone obtained from the compd., where .gtoreq.1 functional group contg. O, N, S, and/or C in the backbone is bonded with the carboxylic groups. The polymer material is obtained by dispersing the compd. in a polymer matrix. The polymer material showed improved heat resistance and mech. strength.
IT **187093-37-4P**
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(optically active compd. for polymer nonlinear optical material with improved heat resistance)
RN 187093-37-4 HCAPLUS
CN Poly[imino(1-oxo-1,3-propanediyl)[[4-[(4-nitrophenyl)azo]phenyl]imino](3-oxo-1,3-propanediyl)imino-1,4-phenylene[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]-1,4-phenylene] (9CI) (CA INDEX NAME)

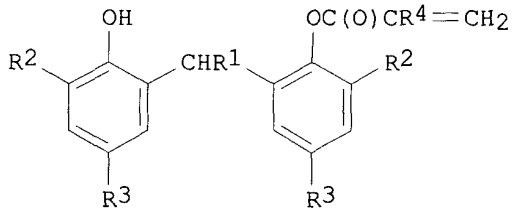




L44 ANSWER 5 OF 11 HCAPLUS COPYRIGHT 2001 ACS
AN 1995:490204 HCAPLUS
DN 123:171410
TI **Conjugated** diene-vinyl arom. hydrocarbon block copolymers and compositions
IN Ida, Kanako; Yamaguchi, Tetsuo
PA Sumitomo Chemical Co, Japan
SO Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 07026107	A2	19950127	JP 1993-176564	19930716

GI



I

AB The title compns. with good heat stability during molding contain (A) block copolymers comprising **conjugated** dienes and 60-95% vinyl arom. hydrocarbons, acrylate-type compds. I (R1 = H, C1-3 alkyl; R2-3 = C1-9 alkyl; R4 = H, Me) (B) and hydrocarbon waxes. Thus, 75:25 styrene-butadiene block copolymer contg. 2,4-di-tert-amyl-6-[1-(3,5-di-tert-amyl-2-hydroxyphenyl)ethyl]phenyl acrylate 0.2, octadecyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate 0.2, and microcryst. wax

1.0% were melt kneaded at 200.degree., pelletized, and injection molded at
270.degree. to give a test piece with Haze 12 vs. 63 for a test piece without the additives.

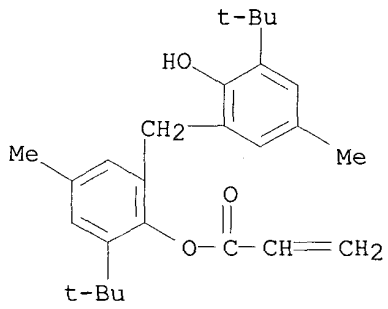
IT **167217-03-0**
RL: MOA (Modifier or additive use); USES (Uses)
(heat-stable compns. prepd. from **conjugated** diene-vinyl arom. hydrocarbon block copolymers, acrylate-type compds., and hydrocarbon waxes for transparent moldings)

RN 167217-03-0 HCAPLUS

CN 2-Propenoic acid, 2-(1,1-dimethylethyl)-6-[[3-(1,1-dimethylethyl)-2-hydroxy-5-methylphenyl]methyl]-4-methylphenyl ester, polymer with 1,3-butadiene and ethenylbenzene (9CI) (CA INDEX NAME)

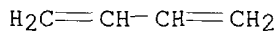
CM 1

CRN 61167-58-6
CMF C26 H34 O3



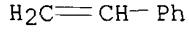
CM 2

CRN 106-99-0
CMF C4 H6



CM 3

CRN 100-42-5
CMF C8 H8

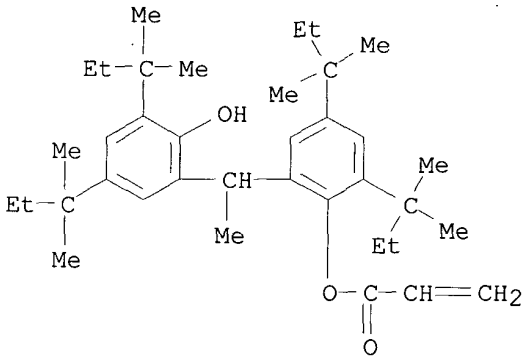


IT **167217-02-9**
RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
(heat-stable compns. prepd. from **conjugated** diene-vinyl arom.

hydrocarbon block copolymers, acrylate-type compds., and hydrocarbon waxes for transparent moldings)
RN 167217-02-9 HCAPLUS
CN 2-Propenoic acid,
2-[1-[3,5-bis(1,1-dimethylpropyl)-2-hydroxyphenyl]ethyl]-
4,6-bis(1,1-dimethylpropyl)phenyl ester, polymer with 1,3-butadiene and ethenylbenzene (9CI) (CA INDEX NAME)

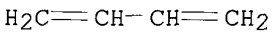
CM 1

CRN 123968-25-2
CMF C37 H56 O3



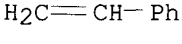
CM 2

CRN 106-99-0
CMF C4 H6



CM 3

CRN 100-42-5
CMF C8 H8

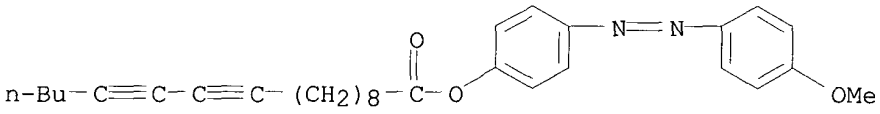


L44 ANSWER 6 OF 11 HCAPLUS COPYRIGHT 2001 ACS
AN 1994:324301 HCAPLUS
DN 120:324301
TI Coupling order and conductivity liquid crystalline **conjugated** polymers
AU Vicentini, F.; Mauzac, M.; Laversanne, R.; Pochat, P.; Parneix, J. P.

CS Cent. Recherche Paul Pascal, Domain Univ., Pessac, 33600, Fr.
SO Liq. Cryst. (1994), 16(5), 721-33
CODEN: LICRE6; ISSN: 0267-8292
DT Journal
LA English
AB Acetylenic and diacetylenic liq.cryst. monomers have been prepd. in order to obtain **conjugated** polymers with an orientational character. Unlike the polydiacetylene derivs. which do not exhibit any mesomorphic behavior, a smectic phase, stable over a large temp. range, occurs in the case of all the polyacetylenes. This mesophase appears to be stabilized by an in situ polymn. of the monomers oriented in the nematic state. After iodine doping, a nematic phase appears in the polymer in addn. to the smectic phase. A.c. complex cond. measurements, realized over a large frequency range, are reported for some undoped polyacetylenes.
IT **155450-80-9P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and elec. cond. of)
RN 155450-80-9 HCAPLUS
CN 10,12-Heptadecadiynoic acid, 4-[(4-methoxyphenyl)azo]phenyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

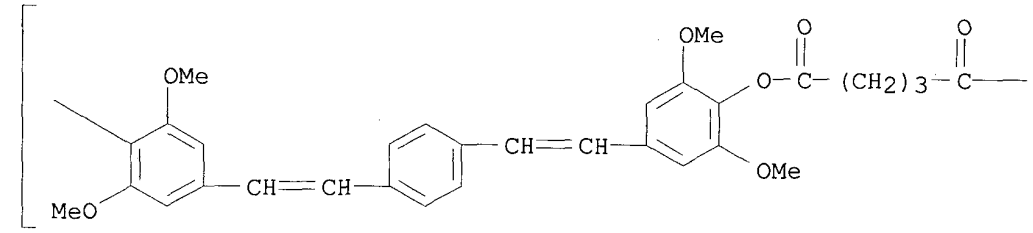
CRN 155450-75-2
CMF C30 H36 N2 O3



L44 ANSWER 7 OF 11 HCAPLUS COPYRIGHT 2001 ACS
AN 1994:218730 HCAPLUS
DN 120:218730
TI Synthesis of electrically conducting copolymers with short alternating **conjugated** and non-**conjugated** blocks
AU Yang, Z.; Karasz, F. E.; Geise, H. J.
CS Dep. Polymer Sci. Eng., Univ. Massachusetts, Amherst, MA, 01003, USA
SO Polymer (1994), 35(2), 391-7
CODEN: POLMAG; ISSN: 0032-3861
DT Journal
LA English
AB Six copolymers with short alternating **conjugated** and non-**conjugated** blockes were synthesized using the Wittig reaction. The **conjugated** block consists of two and one-half units of p-phenylenevinylene with methoxy groups substituted at the 3 and 5 positions of the flanking Ph rings. These rigid blocks are linked to flexible linear alkyl chain spacers by ester groups. The polymers, characterized by 13C NMR FTIR, elemental anal., gel chromatog., and DSC are sol. and fusible. Free-standing films were cast from chloroform solns. and showed elec. conductivities ranging from 10-3 to 10-2 S cm-1 upon doping by iodine vapor at room temp.

IT **154088-47-8P 154088-49-0P 154088-51-4P**
154088-53-6P 154088-55-8P 154088-57-0P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and properties of)
RN 154088-47-8 HCAPLUS
CN Poly[oxy(1,5-dioxo-1,5-pentanediyl)oxy(2,6-dimethoxy-1,4-phenylene)-1,2-ethenediyl-1,4-phenylene-1,2-ethenediyl(3,5-dimethoxy-1,4-phenylene)] (9CI) (CA INDEX NAME)

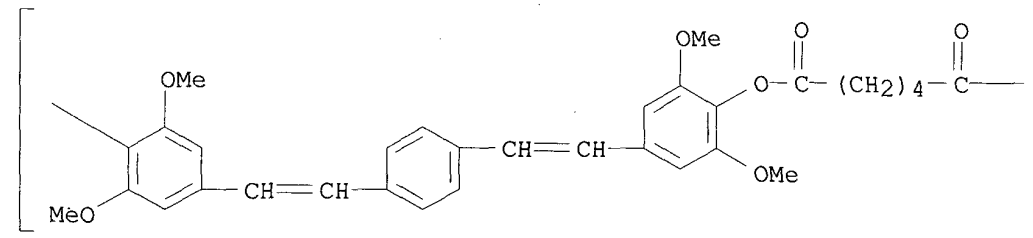
PAGE 1-A



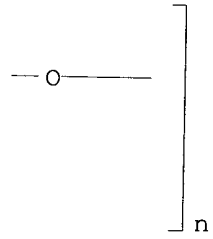
PAGE 1-B

RN 154088-49-0 HCAPLUS
CN Poly[oxy(1,6-dioxo-1,6-hexanediyl)oxy(2,6-dimethoxy-1,4-phenylene)-1,2-ethenediyl-1,4-phenylene-1,2-ethenediyl(3,5-dimethoxy-1,4-phenylene)] (9CI) (CA INDEX NAME)

PAGE 1-A

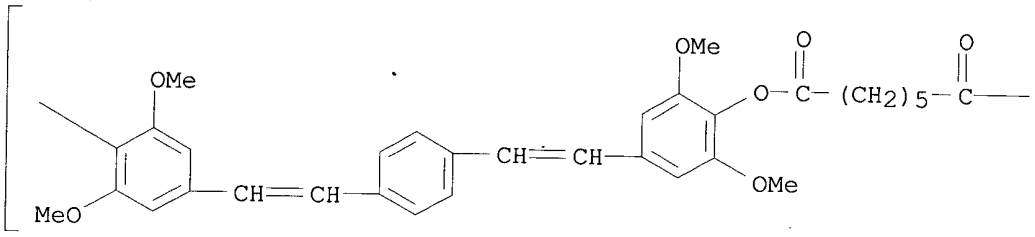


PAGE 1-B

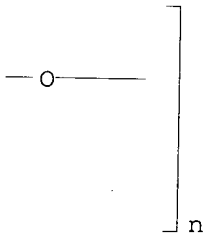


RN 154088-51-4 HCAPLUS
CN Poly[oxy(1,7-dioxo-1,7-heptanediyl)oxy(2,6-dimethoxy-1,4-phenylene)-1,2-ethenediyl-1,4-phenylene-1,2-ethenediyl(3,5-dimethoxy-1,4-phenylene)] (9CI) (CA INDEX NAME)

PAGE 1-A

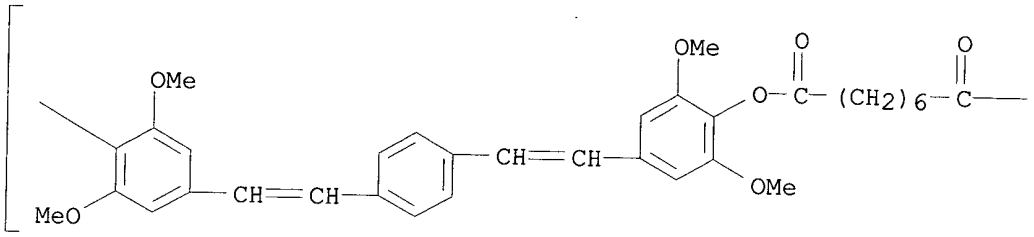


PAGE 1-B

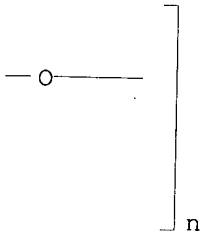


RN 154088-53-6 HCAPLUS
CN Poly[oxy(1,8-dioxo-1,8-octanediyl)oxy(2,6-dimethoxy-1,4-phenylene)-1,2-ethenediyl-1,4-phenylene-1,2-ethenediyl(3,5-dimethoxy-1,4-phenylene)] (9CI) (CA INDEX NAME)

PAGE 1-A

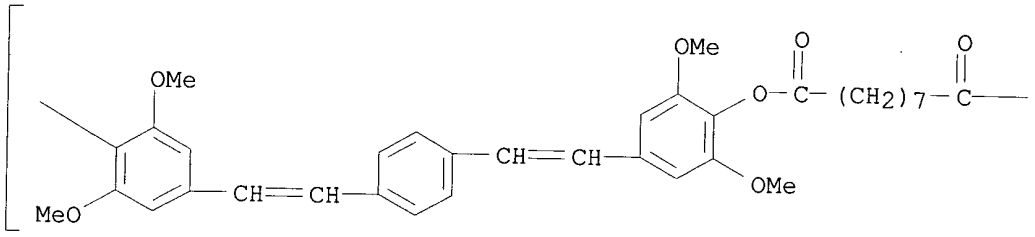


PAGE 1-B

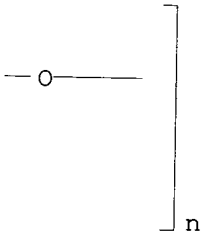


RN 154088-55-8 HCAPLUS
CN Poly[oxy(1,9-dioxo-1,9-nonanediyl)oxy(2,6-dimethoxy-1,4-phenylene)-1,2-ethenediyl-1,4-phenylene-1,2-ethenediyl(3,5-dimethoxy-1,4-phenylene)] (9CI) (CA INDEX NAME)

PAGE 1-A

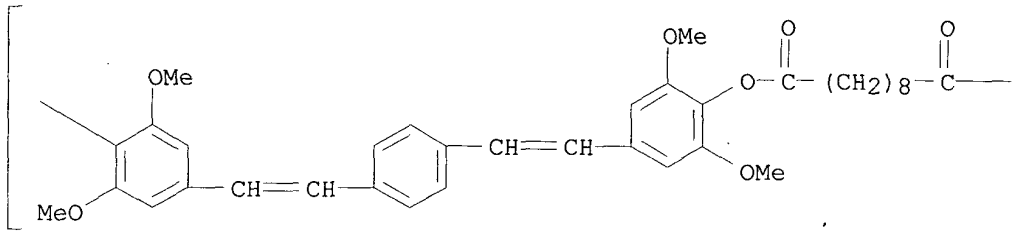


PAGE 1-B

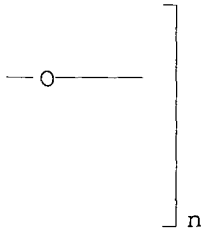


RN 154088-57-0 HCAPLUS
CN Poly[oxy(1,10-dioxo-1,10-decanediyl)oxy(2,6-dimethoxy-1,4-phenylene)-1,2-ethenediyl-1,4-phenylene-1,2-ethenediyl(3,5-dimethoxy-1,4-phenylene)] (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



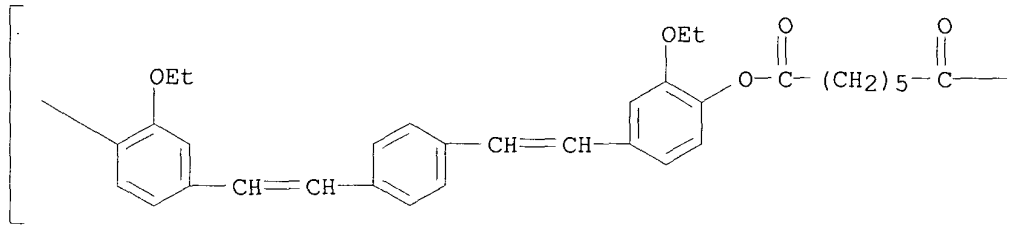
L44 ANSWER 8 OF 11 HCAPLUS COPYRIGHT 2001 ACS
AN 1993:148598 HCAPLUS
DN 118:148598
TI Conductivity and third-order nonlinear optical measurements of polymers with distyrylbenzene and diphenylbutadiene segments
AU Mates, Thomas E.; Ober, Christopher K.; Norwood, Robert
CS Dep. Mater. Sci. Eng., Cornell Univ., Ithaca, NY, 14853, USA
SO Chem. Mater. (1993), 5(2), 217-21
CODEN: CMATEX; ISSN: 0897-4756
DT Journal
LA English
AB Polyesters, polyethers, and an arom. polyamide were prepd. with discrete **conjugated** hydrocarbon segments alternating with flexible spacer groups. These processable polymers were designed for 3rd-order nonlinear optical and cond. studies for comparison with fully **conjugated** polymers. The present materials contain distyrylbenzene or diphenylbutadiene units and have the advantages of soly. and melt processability over fully **conjugated** systems such as polyacetylene. They were found in degenerate 4-wave mixing expts. to have 3rd-order optical susceptibilities (.chi.(3)) on the order of 3 .times. 10-12 esu. These values are within an order of magnitude of the .chi.(3) value reported for unaligned poly(phenylenevinylene). I and H2SO4 doping

provides materials with elec. conductivities from 2 .times. 10-5 to 7 .times. 10-5 S/cm, far lower than that of poly(phenylenevinylene).

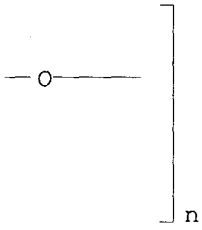
IT **135967-72-5 146225-51-6 146225-54-9**
RL: PRP (Properties)
(elec. cond. of)

RN 135967-72-5 HCAPLUS
CN Poly[oxy(1,7-dioxo-1,7-heptanediyl)oxy(2-ethoxy-1,4-phenylene)-1,2-ethenediyl-1,4-phenylene-1,2-ethenediyl(3-ethoxy-1,4-phenylene)] (9CI) (CA INDEX NAME)

PAGE 1-A

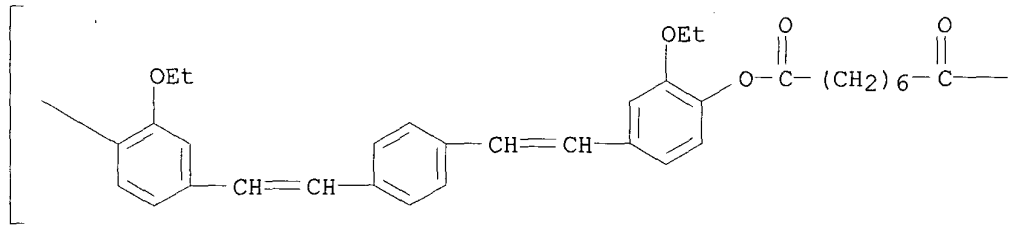


PAGE 1-B

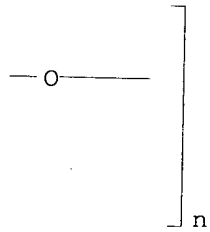


RN 146225-51-6 HCAPLUS
CN Poly[oxy(1,8-dioxo-1,8-octanediyl)oxy(2-ethoxy-1,4-phenylene)-1,2-ethenediyl-1,4-phenylene-1,2-ethenediyl(3-ethoxy-1,4-phenylene)] (9CI) (CA INDEX NAME)

PAGE 1-A

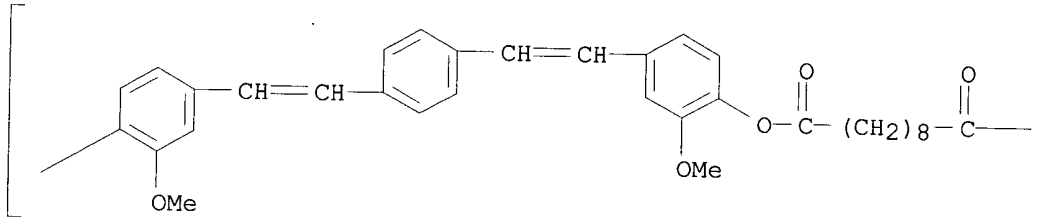


PAGE 1-B

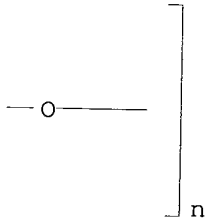


RN 146225-54-9 HCAPLUS
CN Poly[oxy(1,10-dioxo-1,10-decanediyl)oxy(2-methoxy-1,4-phenylene)-1,2-ethenediyl-1,4-phenylene-1,2-ethenediyl(3-methoxy-1,4-phenylene)] (9CI) (CA INDEX NAME)

PAGE 1-A

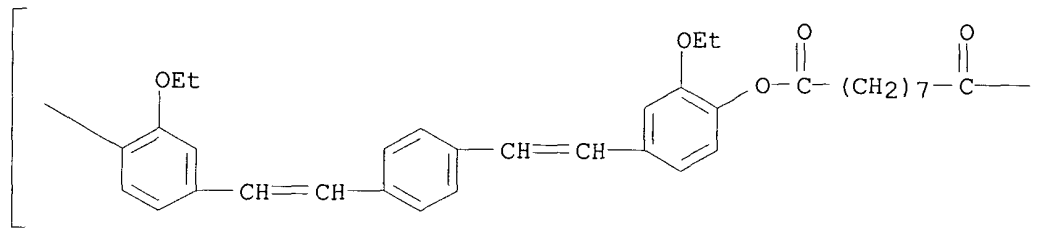


PAGE 1-B

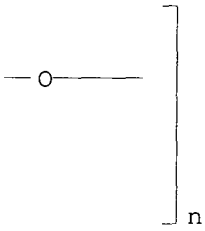


IT **146225-53-8**
RL: PRP (Properties)
(third-order optical nonlinear properties of)
RN 146225-53-8 HCAPLUS
CN Poly[oxy(1,9-dioxo-1,9-nonanediyl)oxy(2-ethoxy-1,4-phenylene)-1,2-ethenediyl-1,4-phenylene-1,2-ethenediyl(3-ethoxy-1,4-phenylene)] (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

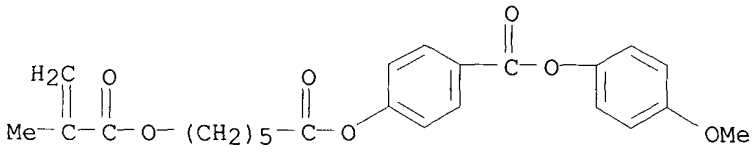


L44 ANSWER 9 OF 11 HCAPLUS COPYRIGHT 2001 ACS
AN 1990:612756 HCAPLUS
DN 113:212756
TI New thermotropic chiral nematic copolymers using (1S,2S,3S,5R)-(+)- and (1R,2R,3R,5S)-(-)-isopinocampheol as building blocks
AU Chen, S. H.; Tsai, M. L.
CS Dep. Chem. Eng., Univ. Rochester, Rochester, NY, 14627, USA
SO Macromolecules (1990), 23(24), 5055-8
CODEN: MAMOBX; ISSN: 0024-9297
DT Journal
LA English
AB Thermotropic chiral nematic side-chain copolymers contg. (1S,2S,3S,5R)-(+)-isopinocampheol or (1R, 2R, 3R, 5S)-(-)-isopinocampheol and cholesterol-contg. copolymers were prepd. With a given nematogenic monomer, an increased vol. swept out by the chiral pendant group by rotation contributed to the enhanced helical twisting power. Enhanced mesomorphic order in both the nematogenic and chiral monomers as a result of an increased extent of **conjugation** or a shortened spacer length tended to suppress the helical twisting power of the copolymer. The inversion of chirality in the side group led to opposite handedness in the helical sense of the cholesteric mesophase.
IT **125848-48-8P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of liq.-cryst., helical twist and mesomorphic order in relation to)
RN 125848-48-8 HCAPLUS
CN Cholest-5-en-3-ol (3.beta.)-, 6-[(2-methyl-1-oxo-2-propenyl)oxy]hexanoate,

polymer with 4-methoxyphenyl 4-[[6-[(2-methyl-1-oxo-2-propenyl)oxy]-1-oxohexyl]oxy]benzoate (9CI) (CA INDEX NAME)

CM 1

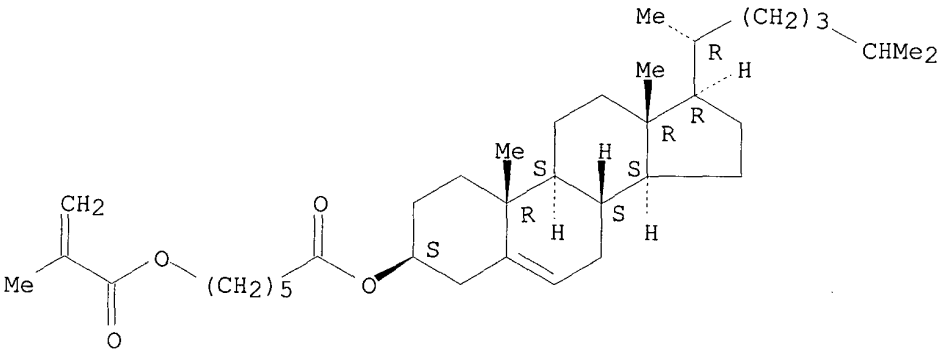
CRN 125848-47-7
CMF C24 H26 O7



CM 2

CRN 77225-90-2
CMF C37 H60 O4
CDES 4:3B.CHOLEST

Absolute stereochemistry.



L44 ANSWER 10 OF 11 HCAPLUS COPYRIGHT 2001 ACS
AN 1985:423056 HCAPLUS
DN 103:23056
TI Polyimides used for moldings and molding compositions
IN Lindner, Christian; Korte, Siegfried; Stix, Wolfgang; Sueling, Carlhans; Ott, Karl Heinz
PA Bayer A.-G. , Fed. Rep. Ger.
SO Ger. Offen., 24 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

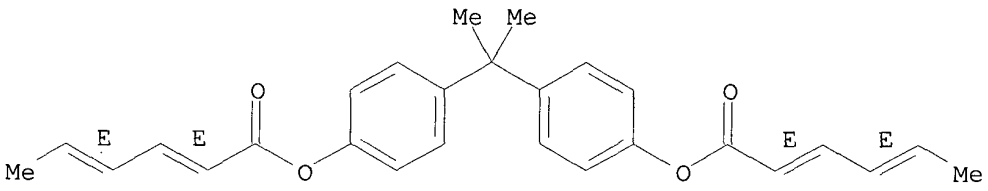
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI DE 3330768 A1 19850314 DE 1983-3330768 19830826
EP 135150 A2 19850327 EP 1984-109742 19840816
EP 135150 A3 19880907
EP 135150 B1 19900808
R: DE, FR, GB, IT, NL
PRAI DE 1983-3330768 19830826
AB The title polyimides, with unique properties, are prepd. by the Diels-Alder polymn. of bismaleimides, with bis derivs. of **conjugated** dienoic acids. Thus, stirring bisphenol A disorbate 16.64, N,N'-(methylenedi-p-phenylene)bismaleimide 14.32, p-MeC6H4SO3H 0.1, antioxidants Ionol KB 0.3 and Irganox PS800 0.1, and N-methylpyrrolidone (I) 50 parts 3.5 h at 80.degree. and 3 h at 90.degree., adding 10 parts I, and stirring 1 h at 95.degree. gave a polyimide [**96743-59-8**] with intrinsic viscosity (I, 25.degree.) 0.55 dL/g and N content 3.5%, giving solns. in I, PhOH, H2SO4, or DMF from which films could be cast. Heating a 15% I soln. of this polyimide 100, Bz2O2 0.4, and triallyl cyanurate 1.5 part at 130.degree. for 1 h gave an insol. film insensitive to fuels, cleaning agents, and oils.
IT **96743-59-8P 96743-63-4P**
RL: PREP (Preparation)
(manuf. of moldable, by Diels-Alder polymn.)
RN 96743-59-8 HCAPLUS
CN 2,4-Hexadienoic acid, (1-methylethylidene)di-4,1-phenylene ester, (all-E)-, polymer with 1,1'-(methylenedi-4,1-phenylene)bis[1H-pyrrole-2,5-dione] (9CI) (CA INDEX NAME)

CM 1

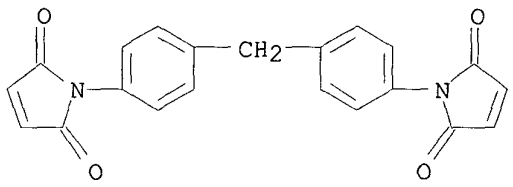
CRN 96743-58-7
CMF C27 H28 O4
CDES 2:ALL,E

Double bond geometry as shown.



CM 2

CRN 13676-54-5
CMF C21 H14 N2 O4

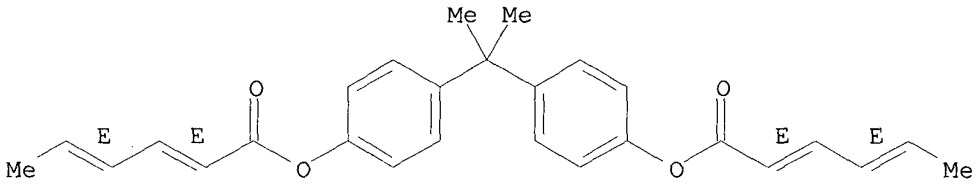


RN 96743-63-4 HCAPLUS
CN 2,4-Hexadienoic acid, (1-methylethylidene)di-4,1-phenylene ester, (all-E)-, polymer with 1,1'-(1,6-hexanediyl)bis[1H-pyrrole-2,5-dione] (9CI) (CA INDEX NAME)

CM 1

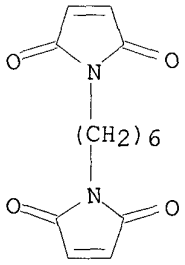
CRN 96743-58-7
CMF C27 H28 O4
CDES 2:ALL,E

Double bond geometry as shown.



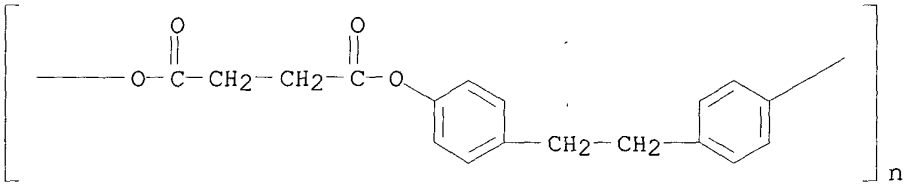
CM 2

CRN 4856-87-5
CMF C14 H16 N2 O4

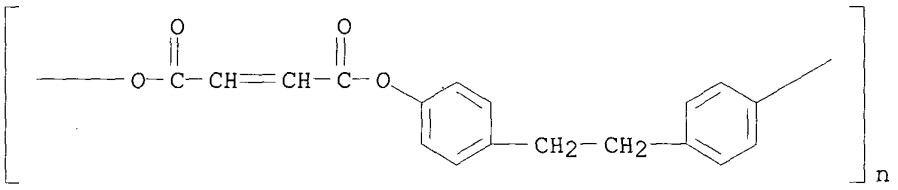


L44 ANSWER 11 OF 11 HCAPLUS COPYRIGHT 2001 ACS
AN 1983:126720 HCAPLUS
DN 98:126720
TI Synthesis of polyesters from 4,4'-dihydroxybibenzyl and -stilbene

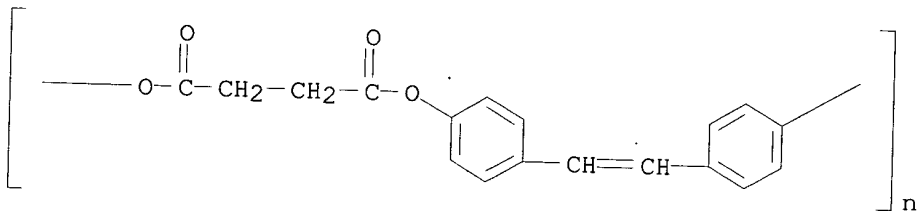
AU Pavlov, L. P.; Retyunskikh, V. V.
CS USSR
SO Deposited Doc. (1982), SPSTL 99 Khp-D82, 7 pp. Avail.: SPSTL
DT Report
LA Russian
AB The bisphenols p-HOC6H4ZC6H4OH-p (Z = CH:CH, CH2CH2) in aq. alk. soln. were polymd. with ClCOZ1COCl (Z1 = Z, C6H4) in PhMe soln. by interfacial polycondensation with or without stirring. Polycondensation in the absence of stirring gave thin, transparent films which could be converted to thick fibers. Polycondensation with stirring gave a product resembling paper pulp. Properties of the polyesters are discussed with respect to copolymer structure and polymn. conditions. Polymers with high chain **conjugation** were the most thermally stable.
IT **85191-22-6P 85191-23-7P 85191-25-9P 85191-26-0P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and properties of)
RN 85191-22-6 HCAPLUS
CN Poly[oxy(1,4-dioxo-1,4-butanediyl)oxy-1,4-phenylene-1,2-ethanediyl-1,4-phenylene] (9CI) (CA INDEX NAME)



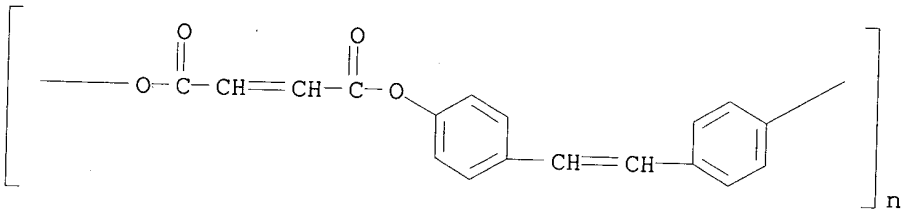
RN 85191-23-7 HCAPLUS
CN Poly[oxy(1,4-dioxo-2-butene-1,4-diyl)oxy-1,4-phenylene-1,2-ethanediyl-1,4-phenylene], (E)- (9CI) (CA INDEX NAME)



RN 85191-25-9 HCAPLUS
CN Poly[oxy(1,4-dioxo-1,4-butanediyl)oxy-1,4-phenylene-1,2-ethenediyl-1,4-phenylene], (E)- (9CI) (CA INDEX NAME)



RN 85191-26-0 HCAPLUS
CN Poly[oxy(1,4-dioxo-2-butene-1,4-diyl)oxy-1,4-phenylene-1,2-ethenediyl-1,4-phenylene], (E,E)- (9CI) (CA INDEX NAME)



Brisbois 3/4/03 #1

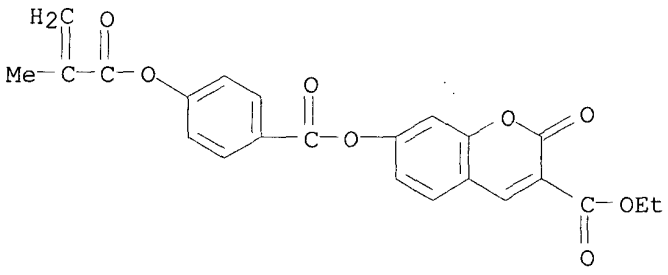
SCHNIZER 09/627,787

=> d bib abs hitstr 1-16

L45 ANSWER 1 OF 16 HCAPLUS COPYRIGHT 2001 ACS
AN 2001:138303 HCAPLUS
DN 135:181371
TI Liquid crystalline coumarin polymers. II: Photo-chemistry of side-group liquid crystalline polymers with coumarin moieties
AU Tian, YanQing; Akiyama, Eiichi; Nagase, Yu; Kanazawa, Akihiko; Tsutsumi, Osamu; Ikeda, Tomiki
CS Sagami Chemical Research Center, Kanagawa, 229-0012, Japan
SO Trans. Mater. Res. Soc. Jpn. (2000), 25(4), 1091-1094
CODEN: TMRJE3; ISSN: 1382-3469
PB Materials Research Society of Japan
DT Journal
LA English
AB Photochem. behaviors of a series of side-group liq. cryst. polymers with coumarin units were investigated by observations of UV-Vis absorption and **fluorescence** spectra with irradn. of UV light by using polymer films and solns. By the irradn. of UV light with .lambda. > 300 nm, photo-dimerization of coumarins was obsd. by using polymers with or without a substituent of ethoxycarbonyl group or ethoxycarbonylmethyl group at the 3 or 4 position of the coumarin ring. The photo-dimerizations of coumarin units were confirmed by photo-cleavage reactions with the irradn. of a light of 254 nm. It was revealed that the photo-dimerizations were affected by the substituents and/or the length of spacer.
IT **355860-39-8**
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(photochem. behavior of side-group liq. cryst. polymers with coumarin moieties)
RN 355860-39-8 HCAPLUS
CN 2H-1-Benzopyran-3-carboxylic acid, 7-[[4-[(2-methyl-1-oxo-2-propenyl)oxy]benzoyl]oxy]-2-oxo-, ethyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 355860-38-7
CMF C23 H18 O8

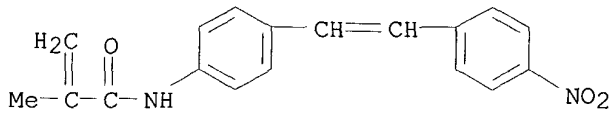


RE.CNT 6
RE
(1) Griffin, A; Makromol Chem Rapid Commun 1988, V9, P463 HCAPLUS
(2) Horspool, W; Photochemistry 1995, V26, P69
(3) Kawatsuki, N; Macromolecules 1998, V31, P5984 HCAPLUS
(4) Matsui, M; Chem Ber 1992, V125, P467 HCAPLUS
(5) Moysan, A; Photochemistry and Photobiology 1988, V47, P327 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L45 ANSWER 2 OF 16 HCAPLUS COPYRIGHT 2001 ACS
AN 2000:537078 HCAPLUS
DN 134:116496
TI Chemical imaging of phase-separated polymer blends by **fluorescence** microscopy
AU Serrano, B.; Baselga, J.; Bravo, J.; Mikes, F.; Sese, L.; Esteban, I.; Pierola, I. F.
CS Departamento de Ciencia de Materiales, Universidad Carlos III, Leganes, 28911, Spain
SO J. Fluoresc. (2000), 10(2), 135-139
CODEN: JOFLEN; ISSN: 1053-0509
PB Kluwer Academic/Plenum Publishers
DT Journal
LA English
AB Blends of poly(vinyl acetate) (PVAc) and poly(cyclohexyl methacrylate) (PCHMA) labeled by copolymn. with 4-methacryloylamine-4'-nitrostilbene (Sb), with (1-pyrenylmethyl)methacrylate (Py), or with 3-(methacryloylamine)propyl-N-carbazole (Cbz) were prepd. by casting dil. solns. in THF (THF) or chloroform. Films about 10 .mu.m thick were formed. Phase sepn. in two types of domains is obsd. by transmission optical microscopy (TOM) and epifluorescence microscopy (EFM): small craters of 1 to 10 .mu.m placed at the polymer-air interface and larger domains, on the scale of 100 .mu.m. The morphol. of samples depends on the compn. of the polymer blend and on solvent. The green **fluorescence** of Sb, the violet of Py, or the blue of Cbz provides imaging of the distribution of PCHMA in the different domains and in the matrix. It is thus obsd. that (i) superficial craters and large domains are formed mainly by PCHMA and (ii) the matrix is composed of PVAc in films cast from THF and it is a blend of the two polymers, homogeneous at the submicrometric scale, for chloroform. The emission intensity of Py, recorded by microfluorescence spectroscopy (MFS), yields a mapping similar to imaging detection. It is remarkable that in films cast from chloroform, the smaller domains are distributed with a 2D hexatic order disrupted by dislocations and disclinations, whereas in films cast from THF, a larger heterogeneity is found, denoting different mechanisms of solvent evapn.
IT **321378-75-0**, Cyclohexyl methacrylate-4-methacryloylamino-4'-nitrostilbene copolymer
RL: PRP (Properties)
(poly(vinyl acetate) blends; chem. imaging of phase-sepd. polymer blends by **fluorescence** microscopy)
RN 321378-75-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, cyclohexyl ester, polymer with 2-methyl-N-[4-[2-(4-nitrophenyl)ethenyl]phenyl]-2-propenamide (9CI) (CA INDEX NAME)

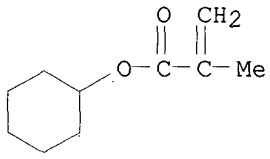
CM 1

CRN 54909-59-0
CMF C18 H16 N2 O3



CM 2

CRN 101-43-9
CMF C10 H16 O2



RE.CNT 14
RE
(2) Atvars, T; J Lumin 1997, V72-74, P467 HCAPLUS
(3) Dibbern-Brunelli, D; J Appl Polym Sci 1995, V55, P889 HCAPLUS
(6) Hutchinson, R; Macromolecules 1998, V31, P1542 HCAPLUS
(7) Jeuris, K; Macromolecules 1998, V31, P8579 HCAPLUS
(8) Li, L; Acta Polym 1996, V47, P407 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L45 ANSWER 3 OF 16 HCAPLUS COPYRIGHT 2001 ACS
AN 1999:364516 HCAPLUS
DN 131:166812
TI Interactions between unimolecular micelles and liposomes
AU Guo, J.; Farrell, S.; Uhrich, K. E.
CS Department of Chemistry, Rutgers University, Piscataway, NJ, 08855, USA
SO Mater. Res. Soc. Symp. Proc. (1999), 550(Biomedical Materials--Drug Delivery, Implants and Tissue Engineering), 89-94
CODEN: MRSPDH; ISSN: 0272-9172
PB Materials Research Society
DT Journal
LA English
AB The interactions between dipalmitoylphosphocholine (DPPC) vesicles and a hyperbranched polymer micelle, Core(hex)PEG5, were examd. by visual observation, differential scanning calorimetry (DSC), **fluorescence** microscopy and dynamic light scattering (DLS). The results from the DSC expts. showed that introducing the polymer to DPPC small unilamellar vesicles completely transformed the vesicles into a large unilamellar structure within minutes, a process that normally takes 2 days at room temp. The hyperbranched polymers transformed the liposomes to the

thermodynamically stable state. **Fluorescence** microscopy expts. showed that the DPPC vesicles became larger after the polymers were added.

In addn., the polymers prevented aggregation of the liposome vesicles yielding clear solns. for up to two weeks at room temp. In contrast, DPPC vesicles without polymers aggregated to form ppt. within hours at room temp. The av. sizes of liposomes and liposome/polymer were detd. by DLS measurement with diams. of 36.3 nm and 65.2 nm, resp.

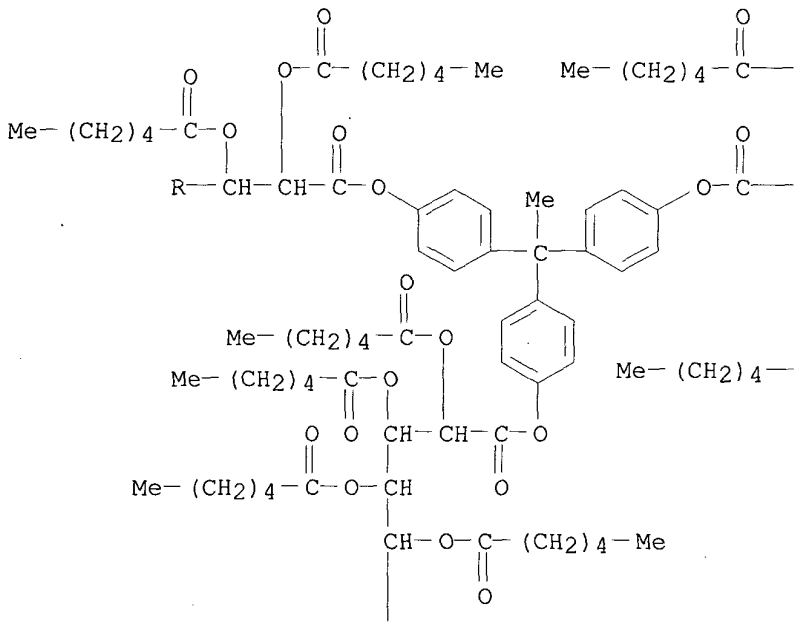
IT **223249-20-5**

RL: BPR (Biological process); BIOL (Biological study); PROC (Process) (hyperbranched polymer micelle; interactions between unimol. micelles and dipalmitoylphosphatidylcholine liposomes)

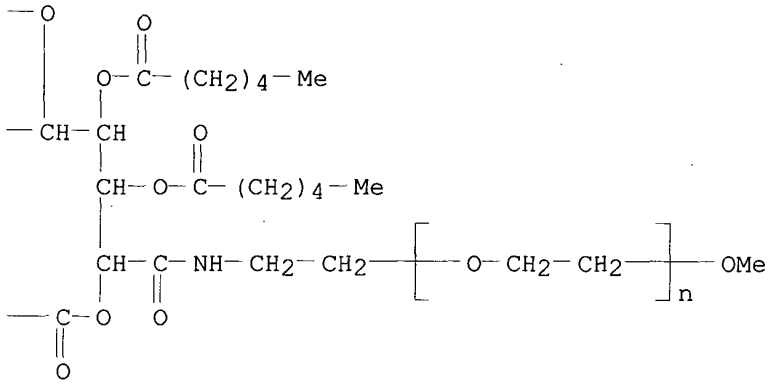
RN 223249-20-5 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.',.alpha.''-[ethylidynetris[4,1-phenyleneoxy[(2R,3S,4R,5S)-1,6-dioxo-2,3,4,5-tetrakis[(1-oxohexyl)oxy]-6,1-hexanediyl]imino-2,1-ethanediyl]]tris[.omega.-methoxy- (9CI) (CA INDEX NAME)

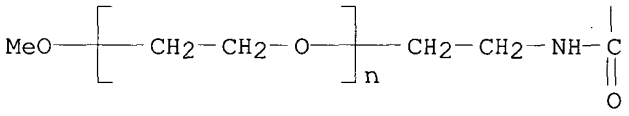
PAGE 1-A

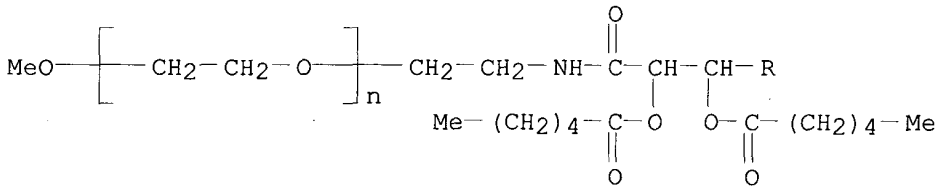


PAGE 1-B



PAGE 2-A



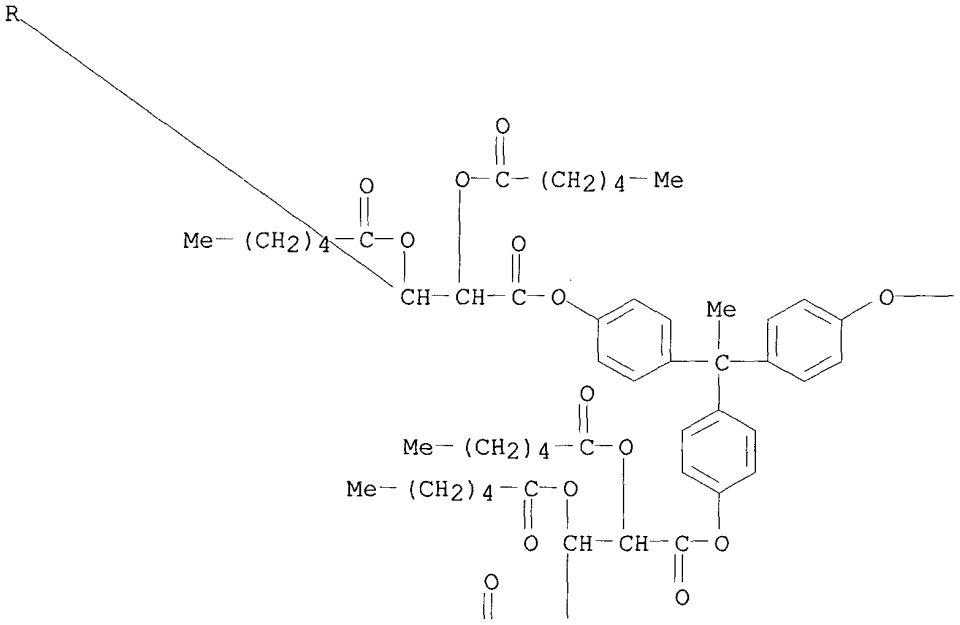


RE.CNT 10
RE
(1) Hong, K; Biochemistry 1988, V27, P3947 HCAPLUS
(2) Jager-Lezer, N; Journal of Controlled Release 1997, V45, P1 HCAPLUS
(5) Lawrence, M; Chem Soc Rev 1994, V23, P417 HCAPLUS
(9) Tomalia, D; Macromolecules 1987, V20, P1164 HCAPLUS
(10) Yokoyama, M; Bioconj Chem 1992, V3, P295 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

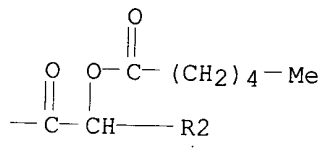
L45 ANSWER 4 OF 16 HCAPLUS COPYRIGHT 2001 ACS
AN 1996:562088 HCAPLUS
DN 125:256971
TI Hyperbranched polymers as a controlled release system
AU Liu, Hongbo; Joshi, Niraj; Uhrich, Kathryn E.
CS Department of Chemistry, Rutgers University, Piscataway, NJ, 08855, USA
SO Polym. Prepr. (Am. Chem. Soc., Div. Polym. Chem.) (1996), 37(2), 147-148

CODEN: ACPPAY; ISSN: 0032-3934
DT Journal
LA English
AB Hyperbranched polymers contg. mucic acid, tris(hydroxyphenyl)ethane, and PEG units were prepd. and the micelle microenvironment studied by **fluorescence.**
IT **182242-87-1P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (hyperbranched polymers as a controlled release system)
RN 182242-87-1 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-methyl-.omega.-hydroxy-, ether with ethylidynetri-4,1-phenylene tris[N-(2-hydroxyethyl)galactaramate] 2,2',2'',3,3',3'',4,4',4'',5,5',5''-dodecahexanoate (3:1) (9CI) (CA INDEX NAME)

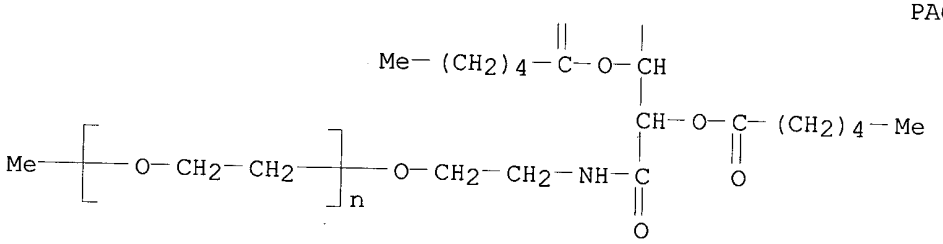
PAGE 1-A

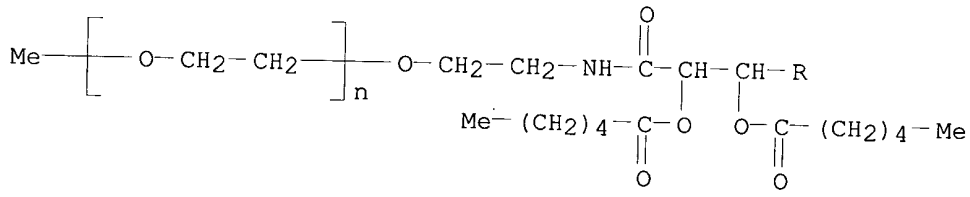


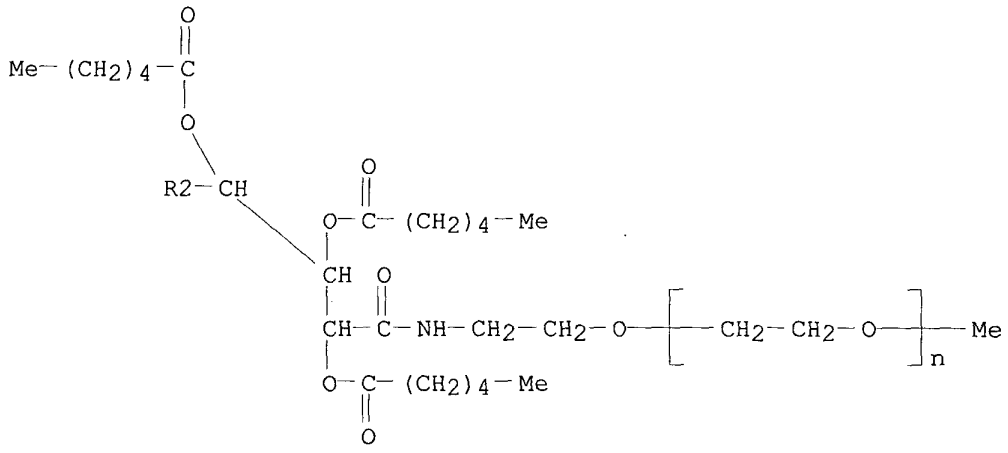
PAGE 1-B



PAGE 2-A

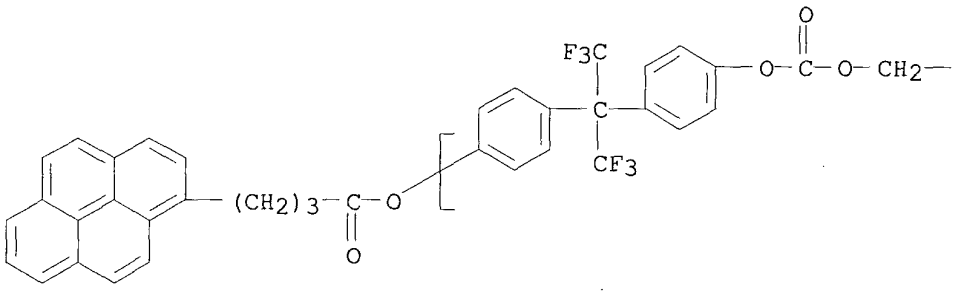




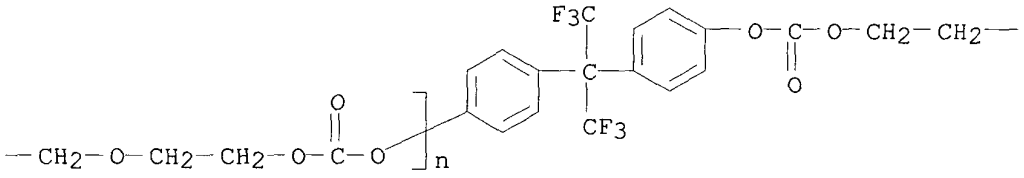


L45 ANSWER 5 OF 16 HCAPLUS COPYRIGHT 2001 ACS
AN 1994:107973 HCAPLUS
DN 120:107973
TI End-to-end cyclization of a pyrene end-capped poly(bisphenol AF-diethylene glycol carbonate) in solution
AU Duhamel, Jean; Khaykin, Yariv; Hu, Yong Zhong; Winnik, Mitchell A.; Boileau, Sylvie; Mechin, Francoise
CS Erindale Coll., Univ. Toronto, Toronto, ON, M5S 1A1, Can.
SO Eur. Polym. J. (1994), 30(1), 129-34
CODEN: EUPJAG; ISSN: 0014-3057
DT Journal
LA English
AB 4,4'-Hexafluoroisopropylidenebisphenol di-Na salt was polycondensed with diethylene glycol bis(chloroformate) and the terminal OH groups were esterified with 4-(1-pyrenyl)butyryl chloride. The polymer mol. wt. and end-group compn. were detd. through a combination of UV absorption and **fluorescence** decay measurements of the pyrene end groups. Through gel-permeation chromatog., several fractions were collected. For each fraction, the cyclization dynamics of the polymer in dil. solns. in Me2CO and PhMe were investigated through studies of intramol. **fluorescent** excimer formation. Values for the rate of excimer formation, the end-to-end cyclization rate const. and its dissocn. rate, and the rate of excimer deactivation were detd.
IT **152341-16-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and kinetics of cyclization and excimer formation of)
RN 152341-16-7 HCAPLUS
CN Poly[oxycarbonyloxy-1,2-ethanediyloxy-1,2-ethanediyloxycarbonyloxy-1,4-phenylene[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]-1,4-phenylene], .alpha.-[4-[2,2,2-trifluoro-1-[4-[[[2-[2-[1-oxo-4-(1-pyrenyl)butoxy]ethoxy]ethoxy]carbonyl]oxy]phenyl]-1-(trifluoromethyl)ethyl]phenyl]-.omega.-[1-oxo-4-(1-pyrenyl)butoxy]- (9CI) (CA INDEX NAME)

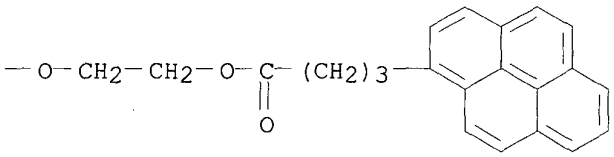
PAGE 1-A



PAGE 1-B



PAGE 1-C

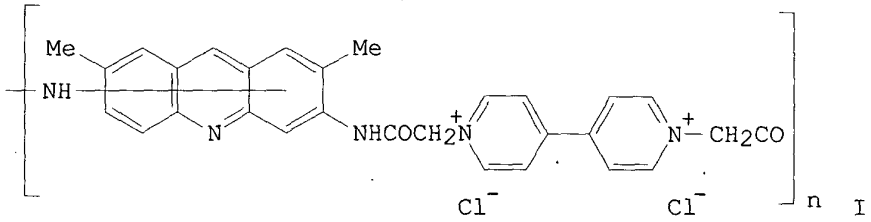


L45 ANSWER 6 OF 16 HCAPLUS COPYRIGHT 2001 ACS
AN 1992:466059 HCAPLUS
DN 117:66059
TI Water-soluble polyamides with luminophore segments as **fluorescent** probes for biological **membrane** investigations
IN Barashkov, N. N.; Sakhno, T. V.; Vakulenko, Yu. A.; Chegolya, A. S.
PA USSR
SO U.S.S.R.
From: Otkrytiya, Izobret. 1991, (19), 96.

CODEN: URXXAF
DT Patent
LA Russian
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	SU 1650658	A1	19910523	SU 1989-4694717	19890522

GI



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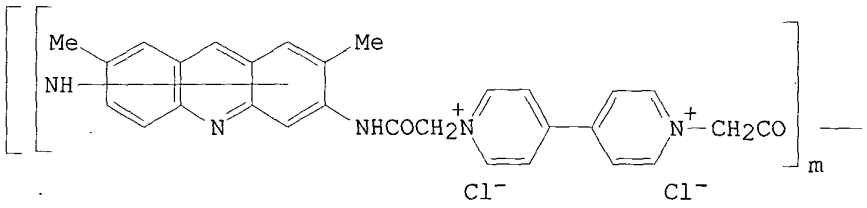
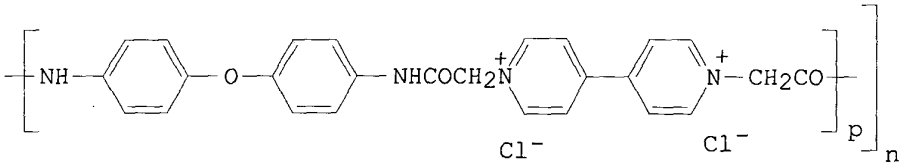




II

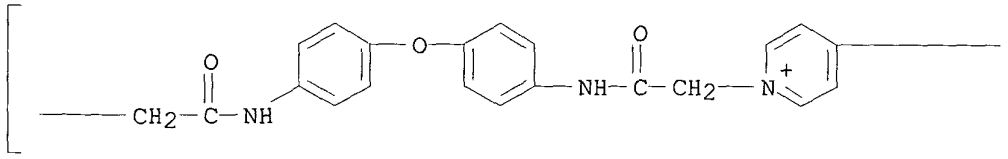
AB H2O-sol. polyamides I (n = 5-15) and II (m = p = 1:1:1:20; n = 5-15) are useful as **fluorescent** probe for biol. **membrane** investigations.

IT **142477-65-4**
RL: ANST (Analytical study)
(**fluorescent** probes, for biol. **membrane** investigation)

RN 142477-65-4 HCAPLUS

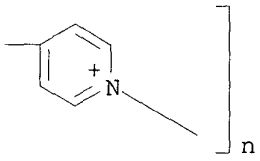
CN Poly[[4,4'-bipyridinium]-1,1'-diyl(2-oxo-1,2-ethanediyl)imino-1,4-phenyleneoxy-1,4-phenyleneimino(1-oxo-1,2-ethanediyl) dichloride] (9CI) (CA INDEX NAME)

PAGE 1-A



●2 Cl⁻

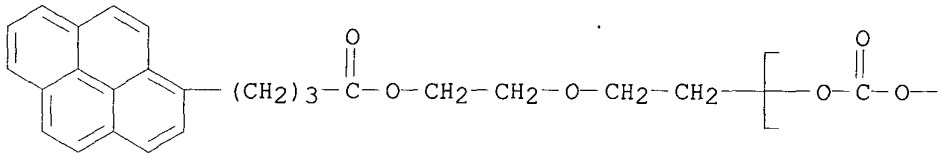
PAGE 1-B



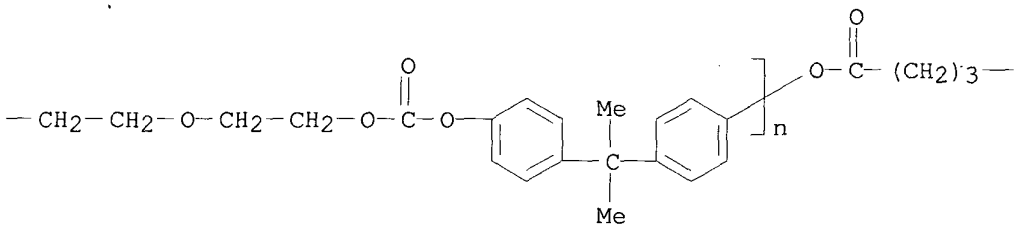
L45 ANSWER 7 OF 16 HCAPLUS COPYRIGHT 2001 ACS
AN 1989:58223 HCAPLUS
DN 110:58223
TI End-to-end cyclization of a pyrene end-capped poly(bisphenol A-diethylene glycol carbonate)
AU Boileau, Sylvie; Mechin, Francoise; Martinho, Jose M. G.; Winnik, Mitchell A.
CS Coll. France, Paris, 75231, Fr.
SO Macromolecules (1989), 22(1), 215-20
CODEN: MAMOBX; ISSN: 0024-9297
DT Journal
LA English
AB The cyclization dynamics of pyrene end-capped bisphenol A di-Na salt-diethylene glycol bischloroformate copolymer in dil. soln. was investigated through studies of intramol. **fluorescent** excimer formation. Steady-state and **fluorescence** decay data were used to det. all the rate consts. for the cyclization of three samples having different mol.wts. Measurements performed in Me2CO, MeCN, and PhMe showed the influence of both viscosity and quality of the solvent. The large extent of cyclization could be explained by the high flexibility of the diethylene glycol moiety and the angular structure of the bisphenol A unit.
IT **116635-36-0**
RL: PRP (Properties)
(end-to-end cyclization kinetics of, excimer **fluorescence** in relation to)
RN 116635-36-0 HCAPLUS

CN Poly[oxycarbonyloxy-1,2-ethanediyloxy-1,2-ethanediyloxycarbonyloxy-1,4-phenylene(1-methylethylidene)-1,4-phenylene], .alpha.-[2-[2-[1-oxo-4-(1-pyrenyl)butoxy]ethoxy]ethyl]-.omega.-[1-oxo-4-(1-pyrenyl)butoxy]- (9CI) (CA INDEX NAME)

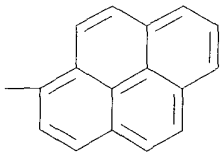
PAGE 1-A



PAGE 1-B



PAGE 1-C

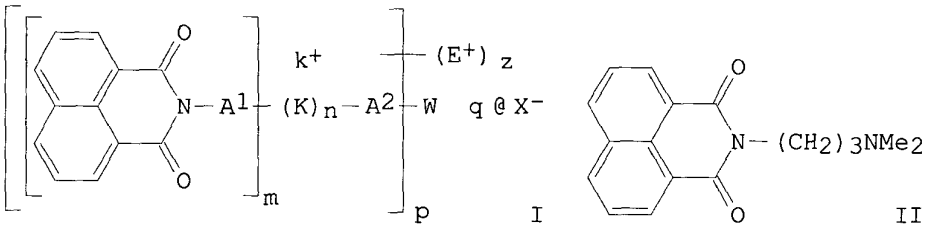


L45 ANSWER 8 OF 16 HCAPLUS COPYRIGHT 2001 ACS
AN 1987:479486 HCAPLUS
DN 107:79486
TI Cationic naphthalimide **fluorescence** quenchers
IN Harnisch, Horst
PA Bayer A.-G. , Fed. Rep. Ger.
SO Ger. Offen., 79 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

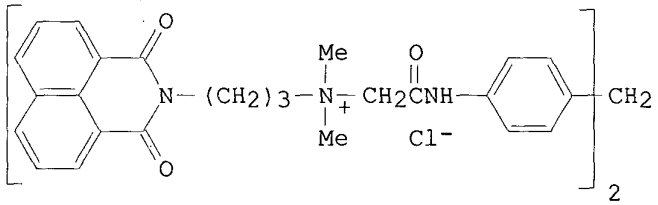
PI	DE 3535496	A1	19870416	DE 1985-3535496	19851004
	EP 217256	A2	19870408	EP 1986-113021	19860922
	EP 217256	A3	19881109		
	EP 217256	B1	19910306		
	R: AT, BE, CH, DE, FR, GB, IT, LI, NL				
	AT 61427	E	19910315	AT 1986-113021	19860922
	JP 62089665	A2	19870424	JP 1986-228503	19860929
	JP 06062571	B4	19940817		
	US 4919848	A	19900424	US 1986-913888	19860930
PRAI	DE 1985-3535496		19851004		
	EP 1986-113021		19860922		

GI



I

II



III

AB Water-sol., practically colorless, cationic compds. I (A1, A2 = bridging group, direct bond; X = anion; E = ammonium group, sulfonium group; K = divalent ammonium group, divalent sulfonium group; W = bridging group, direct bond, H; k, m = 1, 2; n = 0, 1; p = 1-3; q = sum of free cationic charge; z = 0-4; n + z .noteq. 0), useful for quenching **fluorescence** of anionic optical brighteners, are prepd. II reacted with 4,4'-(ClCH2CONHC6H4)2CH2 for 3 h at 100.degree. producing III in 97% theor. yield.

IT **109779-65-9P 109780-36-1P**
RL: PREP (Preparation)
(manuf. of, as water-sol. **fluorescence** quencher for anionic optical brighteners)

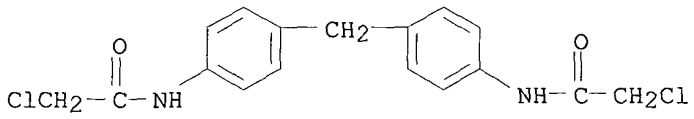
RN 109779-65-9 HCAPLUS

CN Acetamide, N,N'-(methylenedi-4,1-phenylene)bis[2-chloro-, polymer with 2,7-bis[3-(dimethylamino)propyl]benzo[lmn][3,8]phenanthroline-1,3,6,8(2H,7H)-tetrone (9CI) (CA INDEX NAME)

CM 1

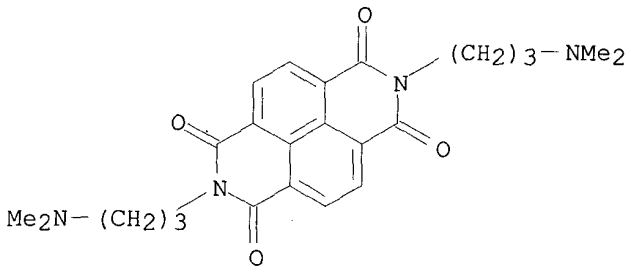
CRN 17328-15-3

CMF C17 H16 Cl2 N2 O2



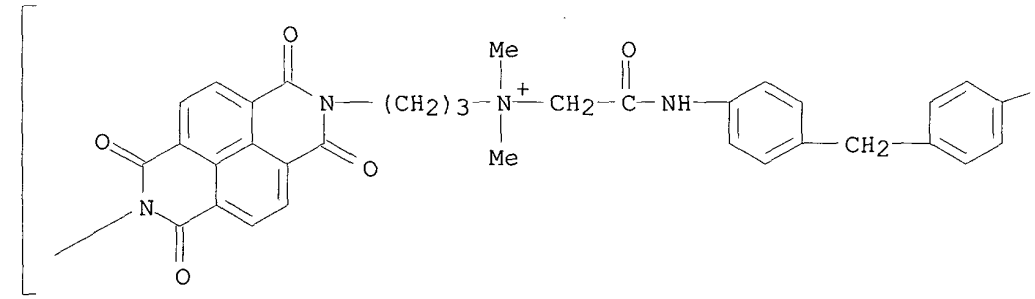
CM 2

CRN 3436-54-2
CMF C24 H28 N4 O4

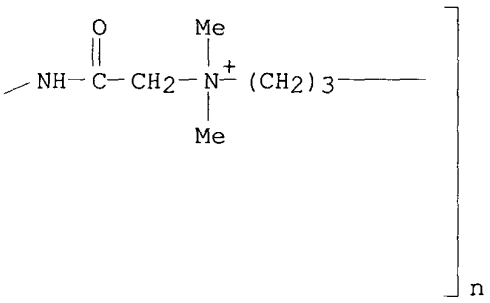


RN 109780-36-1 HCAPLUS
CN
Poly[(1,3,6,8-tetrahydro-1,3,6,8-tetraoxobenzo[lmn][3,8]phenanthroline-2,7-diyl)-1,3-propanediyl(dimethyliminio)(2-oxo-1,2-ethanediyl)imino-1,4-phenylenemethylene-1,4-phenyleneimino(1-oxo-1,2-ethanediyl)(dimethyliminio)-1,3-propanediyl dichloride] (9CI) (CA INDEX NAME)

PAGE 1-A

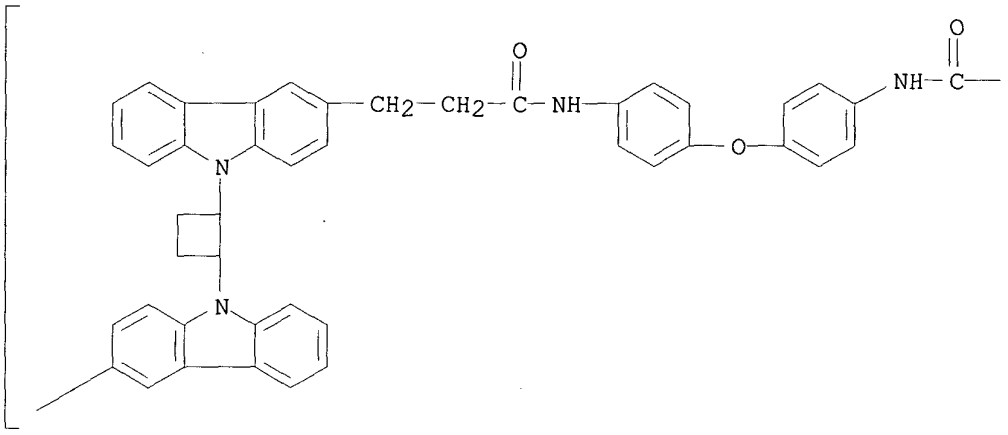


●2 Cl⁻

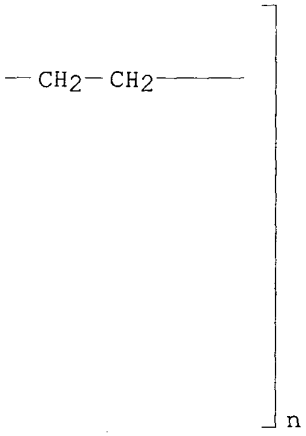


L45 ANSWER 9 OF 16 HCAPLUS COPYRIGHT 2001 ACS
AN 1987:423820 HCAPLUS
DN 107:23820
TI Synthesis of new polyamides having in-chain trans-1,2-dicarbazolylcyclobutane units and their spectroscopic properties
AU Subramaniam, Prema; Sasakawa, Tomoyoshi; Ikeda, Tomiki; Tazuke, Shigeo
CS Res. Lab. Resour. Util., Tokyo Inst. Technol., Yokohama, 227, Japan
SO Makromol. Chem. (1987), 188(5), 1147-55
CODEN: MACEAK; ISSN: 0025-116X
DT Journal
LA English
AB The title polyamides were prepd. by polymn. of 9,9'-(1,2-trans-cyclobutylene)-di-3-carbazolepropionic acid with arom. diamines. The **fluorescence** quantum yields of these polyamides were rather low in comparison with those of trans-1,2-dicarbazolylcyclobutane (DCZB) alone and vinyl polymers contg. the DCZB units. The **fluorescence** decay of the polyamides could be analyzed by a triple exponent decay with life times of 1-2 ns (.apprx.20%), 5-6 ns (.apprx.35%), and 12-14 ns (.apprx.45%).
IT **108916-65-0P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and spectroscopic properties of)
RN 108916-65-0 HCAPLUS
CN
Poly[9H-carbazole-3,9-diyl-1,2-cyclobutanediyl-9H-carbazole-9,3-diyl(3-oxo-1,3-propanediyl)imino-1,4-phenyleneoxy-1,4-phenyleneimino(1-oxo-1,3-propanediyl)], trans- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L45 ANSWER 10 OF 16 HCAPLUS COPYRIGHT 2001 ACS
AN 1983:541224 HCAPLUS
DN 99:141224
TI Plastic lenses
PA Suwa Seikosha Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI	JP 58033201	A2	19830226	JP 1981-131030	19810821

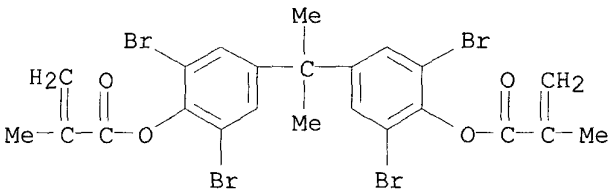
AB Nonyellowing plastic lenses having n .gtoreq. 1.55 were molded from diallyl isophthalate-styrene copolymer [26744-48-9] or a 2,2-bis(3,5-dibromo-4-methacryloyloxyphenyl)propane copolymer with o-chlorostyrene, diallyl 1,2-naphthalenedicarboxylate, or Pb diacrylate, contg. **fluorescent** brighteners. Thus, a compn. of diallyl phthalate 50, Perbutyl PV 1.5, a UV absorber 0.03, ST-5254 Blue [87209-40-3] **fluorescent** brightener 0.02, and styrene to 100 parts was cast molded in a lens mold.

IT **87182-91-0 87182-93-2 87182-94-3**
RL: USES (Uses)
(lenses, contg. **fluorescent** brighteners, nonyellowing, with high refractive index)

RN 87182-91-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis(2,6-dibromo-4,1-phenylene) ester, polymer with 1-chloro-2-ethenylbenzene (9CI) (CA INDEX NAME)

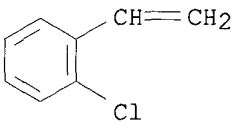
CM 1

CRN 42146-13-4
CMF C23 H20 Br4 O4



CM 2

CRN 2039-87-4
CMF C8 H7 Cl

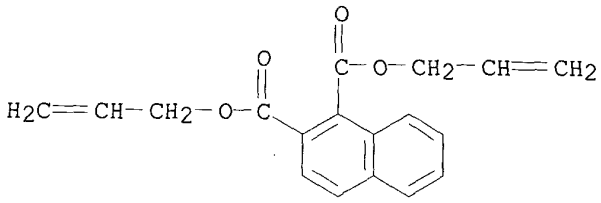


RN 87182-93-2 HCAPLUS
CN 1,2-Naphthalenedicarboxylic acid, di-2-propenyl ester, polymer with (1-methylethylidene)bis(2,6-dibromo-4,1-phenylene) bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CM 1

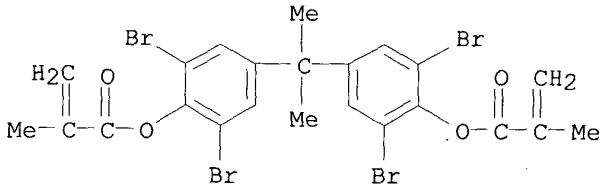
CRN 87182-92-1

CMF C18 H16 O4



CM 2

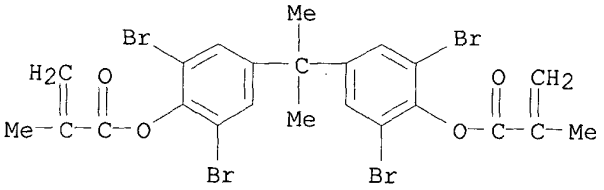
CRN 42146-13-4
CMF C23 H20 Br4 O4



RN 87182-94-3 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis(2,6-dibromo-4,1-phenylene) ester, polymer with lead(2+) di-2-propenoate (9CI) (CA INDEX NAME)

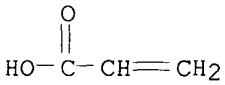
CM 1

CRN 42146-13-4
CMF C23 H20 Br4 O4



CM 2

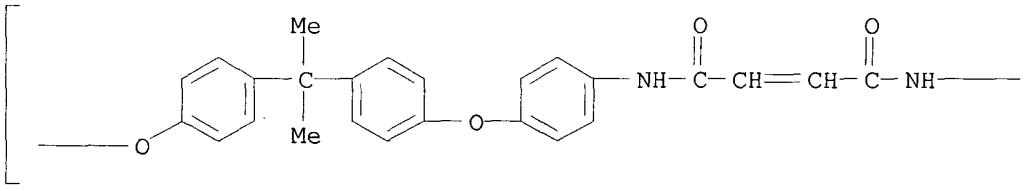
CRN 867-47-0
CMF C3 H4 O2 . 1/2 Pb

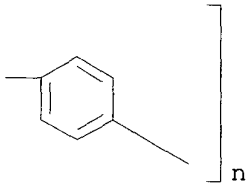


●1/2 Pb(II)

L45 ANSWER 11 OF 16 HCAPLUS COPYRIGHT 2001 ACS
AN 1983:523050 HCAPLUS
DN 99:123050
TI Synthesis and characterization of certain aromatic polyfumaramides
AU Sachindrapal, P.; Nanjan, M. J.
CS A. C. Coll. Campus, Univ. Madras, Madras, 600 025, India
SO J. Polym. Sci., Polym. Chem. Ed. (1983), 21(8), 2301-9
CODEN: JPLCAT; ISSN: 0449-296X
DT Journal
LA English
AB Ten polyfumaramides based on p,p'-arom. diamines [H2NZNH2; Z = p-C6H4, p-C6H4C6H4-p, 3,3'-dimethyl-4,4'-biphenylene, p-C6H4CH:CHC6H4-p, p-C6H4N:NC6H4-p, CH2(C6H4-p)2, O(C6H4-p)2, SO2(C6H4-p)2, p-C6H4CH2CH2C6H4-p, and (p-C6H4O-p-C6H4)2CMe2] and fumaric acid (I) were synthesized by the phosphorylation method (F. Higashi et al., 1980). The polymers were characterized by viscosity, soly., IR and UV-visible spectroscopy, and thermogravimetry. The **fluorescence** spectra of the 4,4'-diaminodiphenyl sulfone-I copolymer [87150-29-6] were studied. A model compd., fumaroyldianilide [6833-07-4], was synthesized and characterized.
IT **87160-12-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and characterization of)
RN 87160-12-1 HCAPLUS
CN Poly[oxy-1,4-phenylene(1-methylethylidene)-1,4-phenyleneoxy-1,4-phenyleneimino(1,4-dioxo-2-butene-1,4-diyl)imino-1,4-phenylene], (E)-(9CI) (CA INDEX NAME)

PAGE 1-A





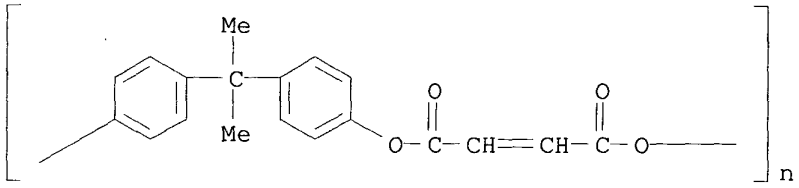
L45 ANSWER 12 OF 16 HCAPLUS COPYRIGHT 2001 ACS
AN 1981:16633 HCAPLUS
DN 94:16633
TI Storable adhesives which harden in the absence of air
IN Catena, William J.
PA National Starch and Chemical Corp., USA
SO Ger. Offen., 46 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3012478	A1	19801016	DE 1980-3012478	19800331
	DE 3012478	C2	19830203		
	US 4235986	A	19801125	US 1979-26091	19790402
	CA 1130048	A1	19820817	CA 1980-347839	19800318
	GB 2045781	A	19801105	GB 1980-10359	19800327
	GB 2045781	B2	19830126		
	FR 2453202	A1	19801031	FR 1980-7004	19800328
	FR 2453202	B1	19841102		
	BE 882554	A1	19800716	BE 1980-200054	19800331
	NL 8001918	A	19801006	NL 1980-1918	19800401
	NL 180521	B	19861001		
	NL 180521	C	19870302		
	JP 55164269	A2	19801220	JP 1980-41259	19800401
	JP 56054348	B4	19811224		
PRAI	US 1979-26091		19790402		

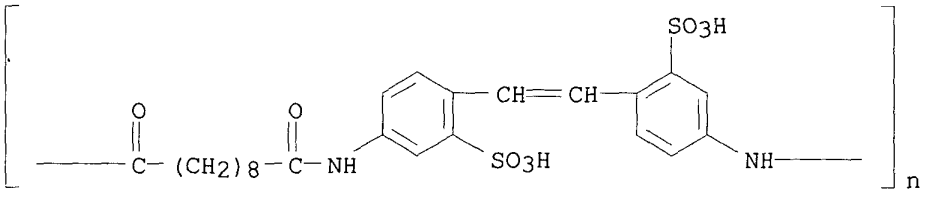
AB A mixt. of an acrylate ester, a polymn. inhibitor, a chelating agent, and a catalyst system comprising saccharin [81-07-2] and an arom. tertiary amine is prepd. and heated at 45-100.degree. to prep. an anaerobic adhesive with good storage stability. Thus, triethylene glycol dimethacrylate (contg. 0.008% hydroquinone) 98.2, saccharin 1.49, N,N-dimethyl-p-toluidine [99-97-8] 0.3, a dye 0.005, a **fluorescent** compd. 0.005, and oxalic acid [144-62-7] chelating agent 0.0026 part were mixed and heated at 60-2.degree. for 24 h to prep. an adhesive (contg. 240 ppm O) which was hardened for 24 h between the threads of a nut and bolt. The torque required to break the adhesive on was 373 in.-lb.

IT **31976-36-0**
RL: USES (Uses)
(thickeners, for acrylic acid ester anaerobic adhesives)
RN 31976-36-0 HCAPLUS

CN Poly[oxy[(2Z)-1,4-dioxo-2-butene-1,4-diyl]oxy-1,4-phenylene(1-methylethylidene)-1,4-phenylene] (9CI) (CA INDEX NAME)

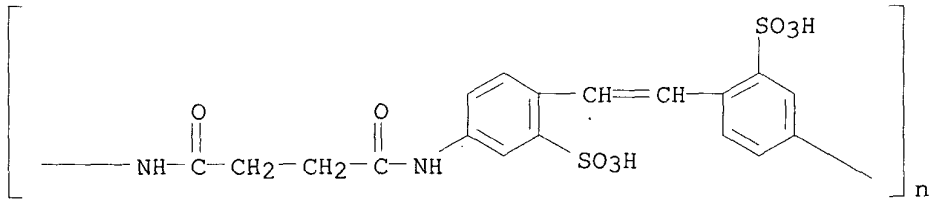


L45 ANSWER 13 OF 16 HCAPLUS COPYRIGHT 2001 ACS
AN 1974:569937 HCAPLUS
DN 81:169937
TI Synthesis of **fluorescent** polymers by interfacial polymerization reactions
AU Uno, Akira; Kondo, Tamotsu
CS Res. Lab., Mitsubishi Pap. Mill Co., Ltd., Tokyo, Japan
SO Polym. J. (1974), 6(4), 267-73
CODEN: POLJB8
DT Journal
LA English
AB **Fluorescent** polymers, such as disodium 2,2'-vinylenebis[5-aminobenzenesulfonate]-terephthaloyl chloride copolymer [50932-42-8], were prepd. by interfacial polymn. of diamines with acid chlorides or diisocyanates, and their **fluorescence** spectrum, intensity, and light resistance were measured and compared with those of the **fluorescent** monomers. The ir spectra showed that polymers had characteristic amide linkage. Viscosity measurements of aq. solns. revealed that they behaved as polyelectrolytes in H2O.
IT **49796-61-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, **fluorescent**)
RN 49796-61-4 HCAPLUS
CN Poly[imino(3-sulfo-1,4-phenylene)-1,2-ethenediyl(2-sulfo-1,4-phenylene)imino(1,10-dioxo-1,10-decanediyl) disodium salt] (9CI) (CA INDEX NAME)



●2 Na

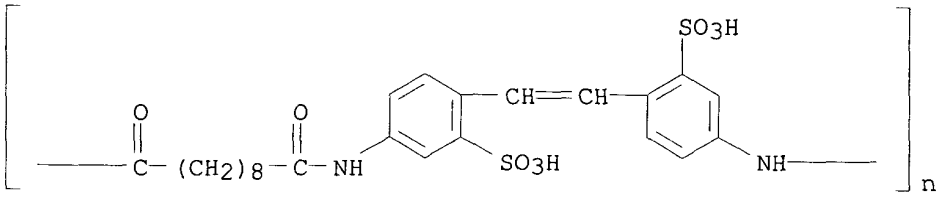
L45 ANSWER 14 OF 16 HCAPLUS COPYRIGHT 2001 ACS
AN 1974:438724 HCAPLUS
DN 81:38724
TI In situ formation and photosensitivity of polymeric stilbene **fluorescent** brighteners on wool
AU Needles, Howard L.; Seiber, Rita P.; Alger, Kenneth W.
CS Dep. Consum. Sci., Univ. California, Davis, Calif., USA
SO Text. Res. J. (1974), 44(4), 315-19
CODEN: TRJOA9
DT Journal
LA English
AB The interfacial polymn. of di-Na 4,4'-diaminostilbene-2,2'-disulfonate (I)
with diacid chlorides or diisocyanates on the surface of wool fabrics did not lower the tensile strength of the irradiated polymer-brightened fabrics but they were less reflective and more yellow than irradiated wool
samples brightened with monomeric stilbene derivs. Wool fabric samples were immersed in aq. I contg. 0.1% Na lauryl sulfate 30-120 sec, passed through a lab. pad to remove excess soln., immediately immersed in succinyl chloride in a water-immiscible solvent, passed through a wringer,
heated 15 min at 100-10.deg., rinsed in hot H2O, dried and conditioned to give a fabric with excitation max. 387 nm, and **fluorescence** max. 440 nm but subject to rapid hydrolysis. Other chlorides and diisocyanates
used were hexamethylene diisocyanate, methylenedi-p-phenylene diisocyanate, sebacoyl chloride, tolylene diisocyanate and terephthaloyl chloride.
IT **49796-60-3 49796-61-4 52277-48-2**
RL: USES (Uses)
(**fluorescent** brightener, in situ formation of, on wool, photostability of)
RN 49796-60-3 HCAPLUS
CN Poly[imino(1,4-dioxo-1,4-butanediyl)imino(3-sulfo-1,4-phenylene)-1,2-ethenediyl(2-sulfo-1,4-phenylene) disodium salt] (9CI) (CA INDEX NAME)



●2 Na

RN 49796-61-4 HCAPLUS
CN Poly[imino(3-sulfo-1,4-phenylene)-1,2-ethenediyl(2-sulfo-1,4-

phenylene)imino(1,10-dioxo-1,10-decanediyl) disodium salt] (9CI) (CA INDEX NAME)

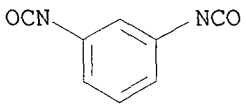


●2 Na

RN 52277-48-2 HCAPLUS
CN Benzenesulfonic acid, 2,2'-(1,2-ethenediyl)bis[5-(acetylamino)-,. disodium salt, polymer with 1,3-diisocyanatomethylbenzene (9CI) (CA INDEX NAME)

CM 1

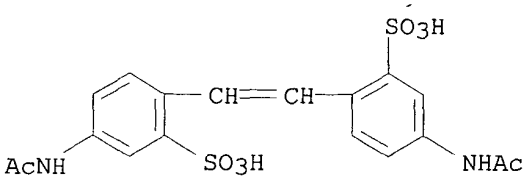
CRN 26471-62-5
CMF C9 H6 N2 O2
CCI IDS
CDES 8:ID



D1—Me

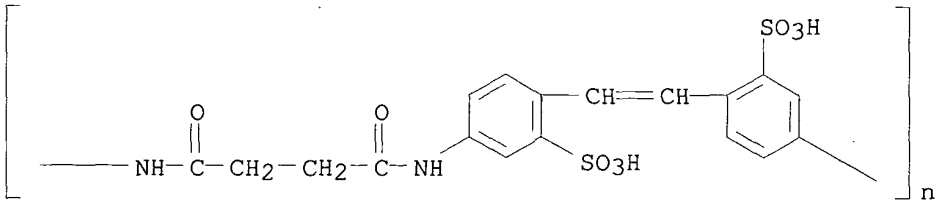
CM 2

CRN 5668-03-1
CMF C18 H18 N2 O8 S2 . 2 Na



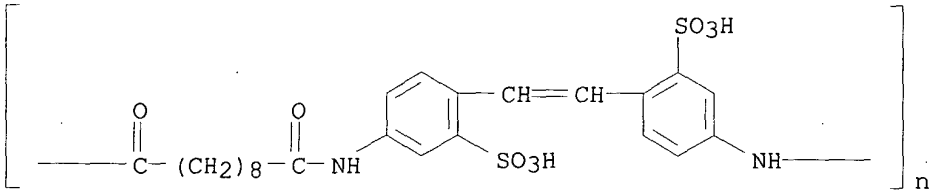
●2 Na

L45 ANSWER 15 OF 16 HCAPLUS COPYRIGHT 2001 ACS
AN 1973:480304 HCAPLUS
DN 79:80304
TI **Fluorescent** polyamides and polyureas based on stilbene
AU Seiber, Rita P.; Needles, Howard L.
CS Dep. Consum. Sci., Univ. California, Davis, Calif., USA
SO J. Polym. Sci., Polym. Chem. Ed. (1973), 11(6), 1439-42
CODEN: JPLCAT
DT Journal
LA English
AB **Fluorescent** polyamide and polyurea whiteners based on stilbene were prepd. by the interfacial polycondensation of disodium 4,4'-diaminostilbene-2,2'-disulfonate [7336-20-1] with succinoyl choride, sebacoyl chloride, p-C6H4(COCl)2, OCN(CH2)6NCO, p-OCNC6H4CH2C6H4NCO-p, and tolylene diisocyanate in 15-78%. The polymeric whiteners exhibit more color stability after irradn. than do the monomeric **fluorescent** whiteners 4,2-AcNH(NaO3S)C6H3CH:CHC6H3(SO3Na)NHAc-2,4 and 4,2-PhNHCONH(NaO3S)C6H3CH:CHC6H3(SO3Na)NHCONHPh.
IT **49796-60-3 49796-61-4**
RL: USES (Uses)
(**fluorescent** brighteners, color stability of)
RN 49796-60-3 HCAPLUS
CN Poly[imino(1,4-dioxo-1,4-butanediyl)imino(3-sulfo-1,4-phenylene)-1,2-ethenediyl(2-sulfo-1,4-phenylene) disodium salt] (9CI) (CA INDEX NAME)



●2 Na

RN 49796-61-4 HCAPLUS
CN Poly[imino(3-sulfo-1,4-phenylene)-1,2-ethenediyl(2-sulfo-1,4-phenylene)imino(1,10-dioxo-1,10-decanediyl) disodium salt] (9CI) (CA INDEX NAME)



●2 Na

L45 ANSWER 16 OF 16 HCAPLUS COPYRIGHT 2001 ACS
AN 1970:426619 HCAPLUS
DN 73:26619
TI **Fluorescent** whiteners
IN Booth, Gary E.
PA Procter and Gamble Co.
SO Ger. Offen., 111 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 1949137	A	19700423	DE 1969-1949137	19690929
	FR 2019511	A5	19700703	FR 1969-33185	19690929
	BE 739640	A	19700331	BE 1969-739640	19690930
	NL 6914755	A	19700401	NL 1969-14755	19690930
PRAI	US 1968-763944		19680930		

GI For diagram(s), see printed CA Issue.
AB The title compds., e.g., I, useful on cotton and nylon, are prepd. by condensing difunctional **fluorescent** compds. with difunctional reagents. Thus, 4,2-H2N(H2NO2S)C6H3CH:CHC6H3(SO2NH2)NH2-2,4 was condensed with (CH2COCl)2 in Me2NCHO to give I (R2 = H, X = NH, Y = NHCOCH2CH2CO, Z = OH, R = SO2NH2, n = 2-10), .lambda.max 349 nm. Also prepd. were I (R1, X, Y, Z, R, and n given): H, NH, Q (R = OMe), Cl, SO3Na, 2-10; H, NH, Q (R = NH2), Cl, SO3Na, 2-10; H, NH, NHCOCH2CH2CO, OH, SO2NH3, 2-12; H, NH, Q (R = OMe), Cl, SO2NH2, 2-10; H, NH, Q (R = NH2), Cl, SO2NH2, 2-12; HO, CO, CONH(CH2)6NH, H, H, 2-8; H, NH, NHCOCH2CH2CO, OH, H, 2-12; H, NH, Q (R = OMe), Cl, H, 2-12; H, OCH2(CHOH)4CH2O2C, p-CH:CHC6H4CO, OCH2(CHOH)4CH2OH, H, 2-6; H, OCH2CH(OH)CH2O2C, p-CH:CHC6H4CO, OCH2CH(OH)CH2OH, H, 2-8; H, NH, NHCO(CH2)4CO, OH, SO2NH2, 2-8; H, NH, NHCO(CH2)8CO, OH, SO2NH2, 2-12; H, NH, Q (R = OEt), Cl, SO3Na, 2-12; H, NH, Q (R = Me), Cl, SO2NH2, 2-12;

H, NH, Q (R = OEt), Cl, SO2NH2, 2-12; HO, CO, CONH)CH2)3NH, H, H, 2-12; HO, CO, CONHCH2CH2NH, H, H, 2-12; H, NH, Q (R = MeNEt), Cl, SO3Na, 2-12; H, NH, Q (R = NMe2), Cl, SO3Na, 2-12; H, NH, Q (R = NMe2), Cl, SO2NH2, 2-12; H, NH, Q (R = EtCO), Cl, H, 2-12; H, NH, Q (R = Me), Cl, H, 2-12; H,
NH, Q (R = Me), Cl, SO3Na, 2-12; H, NH, NHCO(CH2)4CO, OH, H, 2-12; H, NH, NHCO(CH2)8CO, OH, H, 2-12; HO, Co, CONH(CH2)3NH, H, OMe, 3-8; H, O, O2CCH2CH2CO, OH, OMe, 2-10; H, NH, COCH2CH2CO, OH, SO3Na, 6-20. Twenty-eight addnl. compds. contg. various heterocyclic ring systems are also described.

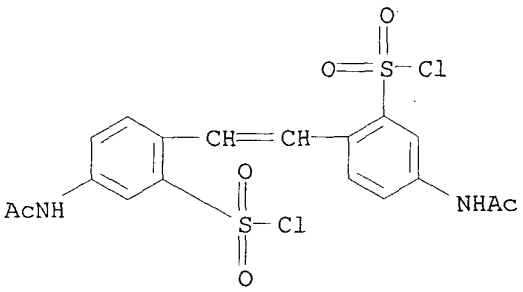
IT **27680-81-5P 27681-50-1P 27734-73-2P 27734-77-6P 29117-05-3P**
RL: IMF (Industrial manufacture); PREP (Preparation)
(prepn. of)

RN 27680-81-5 HCAPLUS

CN 2,2'-Stilbenedisulfonyl chloride, 4,4'-diacetamido-, polyamide with 1,3-propanediamine (8CI) (CA INDEX NAME)

CM 1

CRN 47658-54-8
CMF C18 H16 Cl2 N2 O6 S2



CM 2

CRN 109-76-2
CMF C3 H10 N2

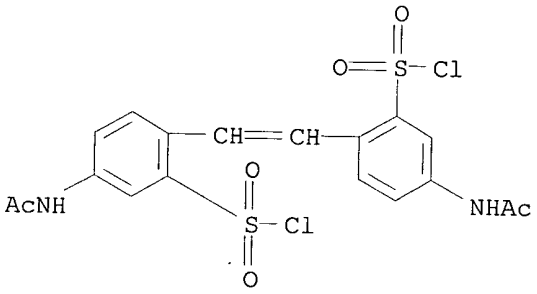
$H_2N-CH_2-CH_2-CH_2-NH_2$

RN 27681-50-1 HCAPLUS

CN 2,2'-Stilbenedisulfonyl chloride, 4,4'-diacetamido-, polyamide with 1,6-hexanediamine (8CI) (CA INDEX NAME)

CM 1

CRN 47658-54-8
CMF C18 H16 Cl2 N2 O6 S2

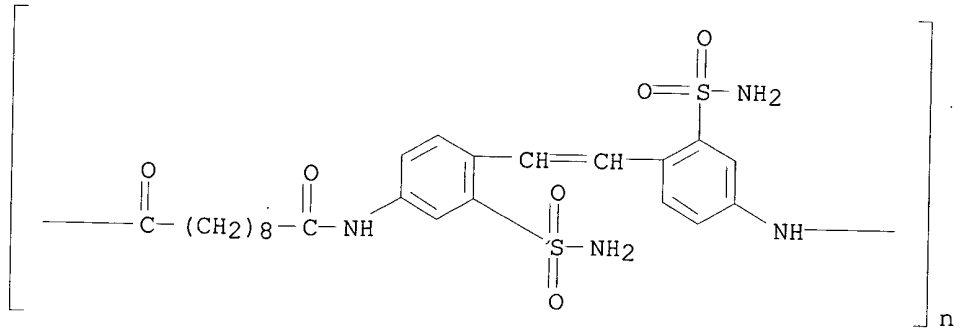


CM 2

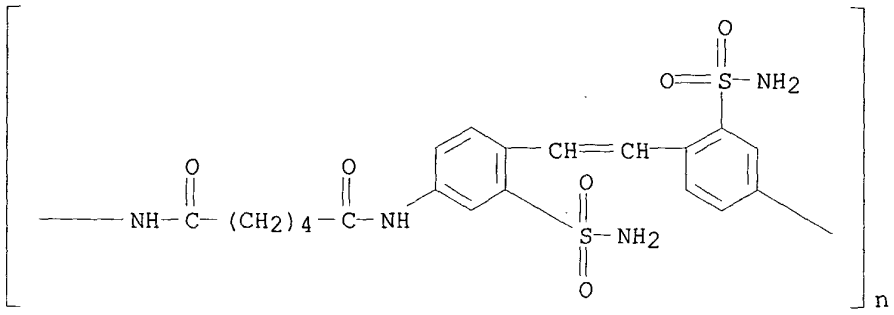
CRN 124-09-4
CMF C6 H16 N2

$H_2N-(CH_2)_6-NH_2$

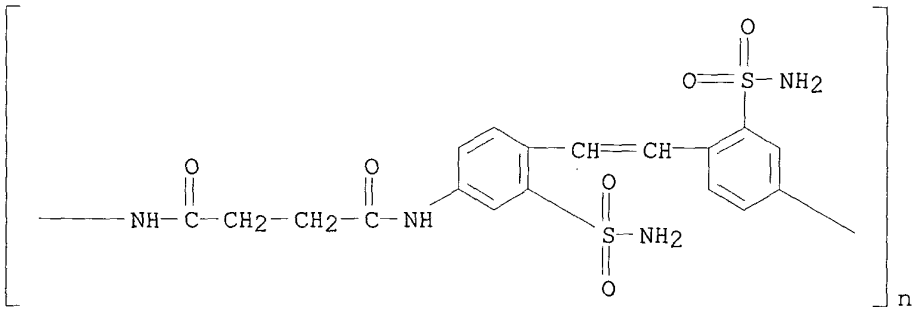
RN 27734-73-2 HCAPLUS
CN Poly[imino(3-sulfamoyl-p-phenylene)vinylene(2-sulfamoyl-p-phenylene)iminosebacoyl] (8CI) (CA INDEX NAME)



RN 27734-77-6 HCAPLUS
CN Poly[iminoadipoylimino(3-sulfamoyl-p-phenylene)vinylene(2-sulfamoyl-p-phenylene)] (8CI) (CA INDEX NAME)



RN 29117-05-3 HCAPLUS
CN Poly[iminosuccinylimino(3-sulfamoyl-p-phenylene)vinylene(2-sulfamoyl-p-phenylene)] (8CI) (CA INDEX NAME)



Brother 3 Pulos #1

SCHNIZER 09/627,787

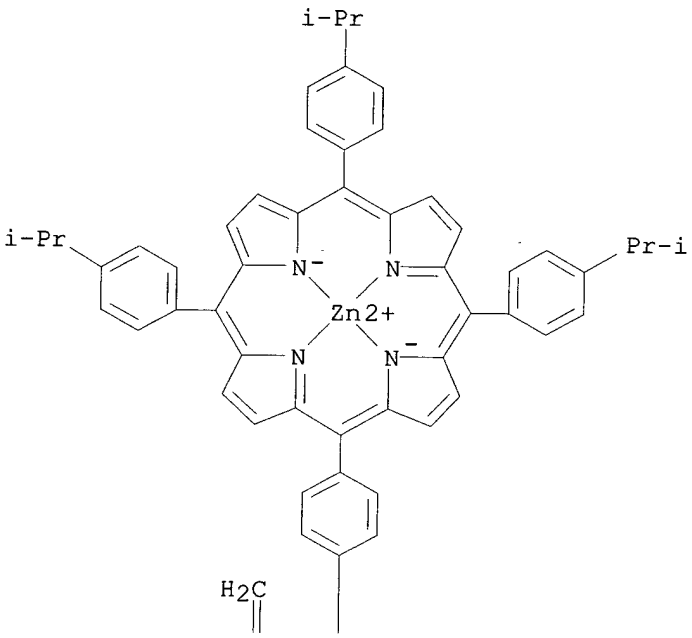
=> d bib abs hitstr 1-7

L68 ANSWER 1 OF 7 HCAPLUS COPYRIGHT 2001 ACS
AN 2001:329477 HCAPLUS
DN 135:153391
TI Application of the Freundlich adsorption isotherm in the characterization of molecularly imprinted polymers
AU Umpleby, R. J.; Baxter, S. C.; Bode, M.; Berch, J. K.; Shah, R. N.; Shimizu, K. D.
CS Department of Chemistry and Biochemistry, University of South Carolina, Columbia, SC, 29208, USA
SO Anal. Chim. Acta (2001), 435(1), 35-42
CODEN: ACACAM; ISSN: 0003-2670
PB Elsevier Science B.V.
DT Journal
LA English
AB The binding isotherm for a polymer molecularly imprinted with Et adenine-9-acetate was obsd. to obey the common Freundlich isotherm. To test the generality of the Freundlich isotherm with respect to molecularly imprinted polymers (MIPs), a survey of systems from the literature was conducted, revealing that the Freundlich isotherm gives a good math. approxn. of the binding characteristics for noncovalently imprinted polymers. The utility of the Freundlich isotherm in the calcn. of binding parameters, as well as its limitations and implication of an exponential distribution of binding sites in imprinted polymers were discussed.
IT **287402-13-5**
RL: PRP (Properties)
(application of Freundlich adsorption isotherm in modeling adsorption isotherms of molecularly imprinted polymers)
RN 287402-13-5 HCAPLUS
CN Zinc, [4-[10,15,20-tris[4-(1-methylethyl)phenyl]-21H,23H-porphin-5-yl-.kappa.N21,.kappa.N22,.kappa.N23,.kappa.N24]phenyl 2-methyl-2-propenoato(2-)]-, (SP-4-2)-, polymer with 1,2-ethanediyl bis(2-methyl-2-propenoate) and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

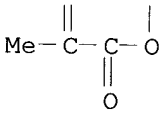
CM 1

CRN 287402-11-3
CMF C57 H50 N4 O2 Zn
CCI CCS
CDES 7:SP-4-2

PAGE 1-A

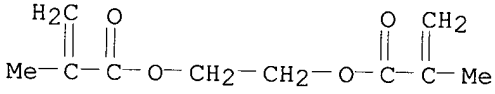


PAGE 2-A



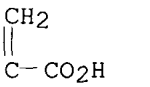
CM 2

CRN 97-90-5
CMF C10 H14 O4



CM 3

CRN 79-41-4
CMF C4 H6 O2

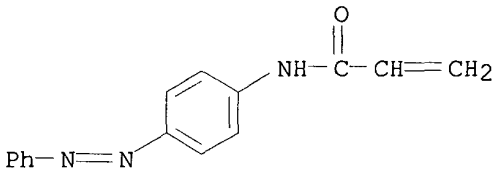


RE.CNT 47
RE
(1) Allender, C; Chirality 1997, V9, P233 HCAPLUS
(2) Andersson, L; Proc Natl Acad Sci USA 1995, V92, P4788 HCAPLUS
(3) Beach, J; J Am Chem Soc 1994, V116, P379 HCAPLUS
(4) Brownawell, B; Environ Sci Technol 1997, V31, P1735 HCAPLUS
(5) Burris, D; Environ Toxicol Chem 1991, V10, P433 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L68 ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2001 ACS
AN 1999:203569 HCAPLUS
DN 131:23373
TI Photocontrolled release behavior of liposomes coated with a water soluble copolymer containing azobenzene groups
AU Shi, Xiangyang; Sun, Caomin; Wu, Shikang
CS Institute of Photographic Chemistry, The Chinese Academy of Sciences, Beijing, 100101, Peop. Rep. China
SO Ganguang Kexue Yu Guang Huaxue (1999), 17(1), 38-44
CODEN: GKKHE9; ISSN: 1000-3231
PB Kexue Chubanshe
DT Journal
LA Chinese
AB The copolymer of N-isopropylacrylamide (NIPAM) and acrylamidoazobenzene (AAAB) was synthesized for the study of the effect of the photoisomerization of a water sol. copolymer contg. azobenzene groups on the photocontrolled release behavior of liposomes. The release property of small unilamellar vesicles (SUV) coated with the copolymer was studied at 25.degree.C by using 5(6)-**carboxyfluorescein** (5(6)-CF) as a water sol. marker. Results showed that under photoirradn., the release of 5(6)-CF from liposomes coated with the copolymer contg. azobenzene groups was remarkably increased and exhibits an obvious photocontrolled release property. This phenomenon was discussed preliminarily.
IT **115088-33-0P**
RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(photocontrolled release behavior of liposomes coated with a water sol. copolymer contg. azobenzene groups)
RN 115088-33-0 HCAPLUS
CN 2-Propenamide, N-(1-methylethyl)-, polymer with N-[4-(phenylazo)phenyl]-2-propenamide (9CI) (CA INDEX NAME)

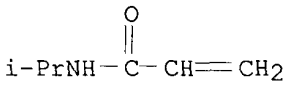
CM 1

CRN 2615-07-8
CMF C15 H13 N3 O



CM 2

CRN 2210-25-5
CMF C6 H11 N O



L68 ANSWER 3 OF 7 HCAPLUS COPYRIGHT 2001 ACS
AN 1997:553940 HCAPLUS
DN 127:227437
TI Polymer and resist material
IN Urano, Fumiyoshi; Fujie, Hirotoshi; Oono, Keiji
PA Wako Pure Chemical Industries, Ltd., Japan
SO Eur. Pat. Appl., 46 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

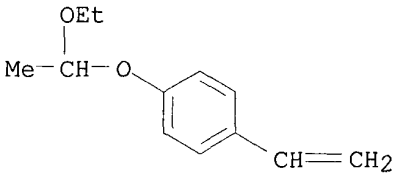
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 789279	A1	19970813	EP 1996-309141	19961213
	EP 789279	B1	20010321		
	R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	AT 199985	E	20010415	AT 1996-309141	19961213
	US 6033826	A	20000307	US 1996-769530	19961219
	CN 1159453	A	19970917	CN 1996-123157	19961220
	JP 10053621	A2	19980224	JP 1997-35572	19970204
PRAI	JP 1996-47955	A	19960209		
	JP 1996-168387	A	19960607		

OS MARPAT 127:227437
AB A copolymer of hydroxystyrene contg. an acetal or ketal group which can easily be eliminated in the presence of an acid in the mol. and having a very narrow mol. wt. distribution gives a resist material suitable for forming ultrafine patterns excellent in resoln., heat resistance, mask linearity, and other properties without causing problems of delay time and the like.
IT **194996-90-2P**
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(prepn. and use in resist materials)

RN 194996-90-2 HCAPLUS
CN Propanoic acid, 2,2-dimethyl-, 4-ethenylphenyl ester, polymer with 1-ethenyl-4-(1-ethoxyethoxy)benzene and 4-ethenylphenol (9CI) (CA INDEX NAME)

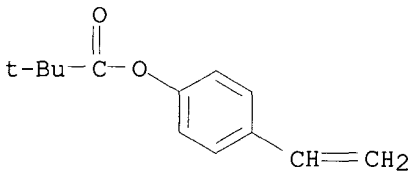
CM 1

CRN 157057-20-0
CMF C12 H16 O2



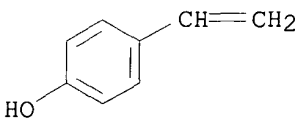
CM 2

CRN 141432-32-8
CMF C13 H16 O2



CM 3

CRN 2628-17-3
CMF C8 H8 O

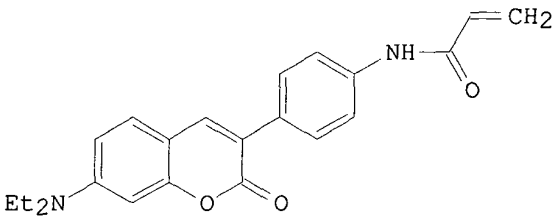


L68 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2001 ACS
AN 1993:644956 HCAPLUS
DN 119:244956
TI Optical solid-phase biosensor, with fluorescence-labeled polyionic layers
IN Siegmund, Hans Ulrich; Heiliger, Ludger; Van Lent, Boudewijn; Becker, Arno

PA Bayer A.-G., Germany
SO Eur. Pat. Appl., 13 pp.
CODEN: EPXXDW
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 561239	A1	19930922	EP 1993-103585	19930305
	EP 561239	B1	19980603		
	R: AT, BE, CH, DE, FR, GB, IT, LI, NL, SE				
	DE 4208645	A1	19930923	DE 1992-4208645	19920318
	AT 166974	E	19980615	AT 1993-103585	19930305
	JP 06027106	A2	19940204	JP 1993-77450	19930312
	CA 2091635	AA	19930919	CA 1993-2091635	19930315
	US 5711915	A	19980127	US 1995-547272	19951024
PRAI	DE 1992-4208645		19920318		
	US 1993-28858		19930310		

GI



I

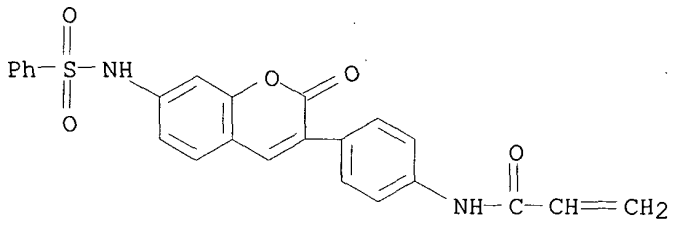
AB The title biosensor for detection of a fluorescent-labeled analyte in soln. bears .gtoreq.1 surface polyionic layer to which are bound an analyte receptor and a 2nd fluorophore. The analyte is detd. from the Foerster radiationless energy transfer between the 2 fluorophores as measured by the change in their relative fluorescence intensities. If unlabeled, the analyte may be detd. by displacement of a fluorescent-labeled analog from the polyionic layer. Thus, a glass slide was coated successively with polylysine, with azobisisobutyronitrile-crosslinked K sulfopropyl methacrylate copolymer with coumarin II (I), and with digitoxigenin-derivatized polylysine. Contact of this biosensor with TRITC-labeled anti-digoxin IgG resulted in quenching of the I fluorescence.

IT **151137-49-4 151164-39-5**
RL: ANST (Analytical study)
(biosensor contg. layer of, for FIA)

RN 151137-49-4 HCAPLUS
CN Benzenesulfonic acid, 4-ethenyl-, sodium salt, polymer with N-[4-[2-oxo-7-[(phenylsulfonyl)amino]-2H-1-benzopyran-3-yl]phenyl]-2-propenamide (9CI) (CA INDEX NAME)

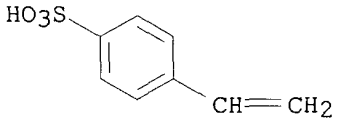
CM 1

CRN 151110-17-7
CMF C24 H18 N2 O5 S



CM 2

CRN 2695-37-6
CMF C8 H8 O3 S . Na

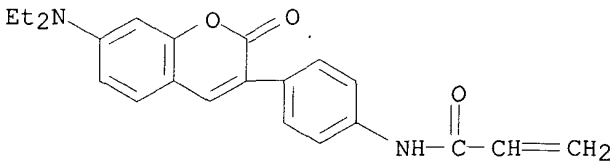


● Na

RN 151164-39-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 3-sulfopropyl ester, potassium salt, polymer with N-[4-[7-(diethylamino)-2-oxo-2H-1-benzopyran-3-yl]phenyl]-2-propenamide (9CI) (CA INDEX NAME)

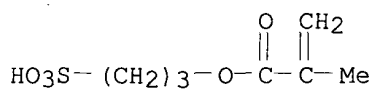
CM 1

CRN 147024-88-2
CMF C22 H22 N2 O3



CM 2

CRN 31098-21-2
CMF C7 H12 O5 S . K

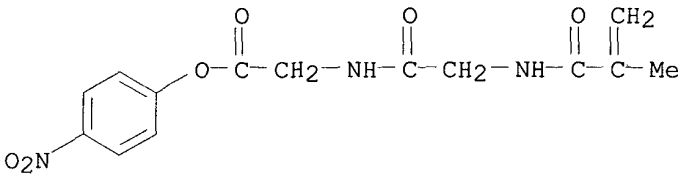


● K

L68 ANSWER 5 OF 7 HCAPLUS COPYRIGHT 2001 ACS
AN 1986:74935 HCAPLUS
DN 104:74935
TI Biological properties of targetable poly[N-(2-hydroxypropyl)methacrylamide]-antibody conjugates
AU Rihova, Blanka; Kopecek, Jindrich
CS Inst. Microbiol., Czechoslovak Acad. Sci., Prague, CS-142 20, Czech.
SO J. Controlled Release (1985), 2, 289-310
CODEN: JCREEC
DT Journal
LA English
AB Conjugates of copolymers of N-(2-hydroxypropyl)methacrylamide (HPMA) with **antifluorescein** isothiocyanate or anti-.theta.-antibodies were prepd. for drug targeting. Although partial inactivation of the antibodies does take place in the course of their binding onto the polymer, the polymer-antibody conjugates retain their specific binding activity both in vitro and in vivo. Copolymers contg. a quaternary ammonium group and a bound anti-.theta.-antibody are 70-fold more effective against T lymphocytes, expressing .theta.-alloantigen, than an analogous polymer bound to nonspecific gamma globulin. The activities of daunomycin-anti-.theta.-antibody-copolymer HPMA complexes, one contg. a degradable and the other a nondegradable oligopeptide sequence in the side chain, were compared. When daunomycin was bound to the end of a sequence degradable with lysosomal enzymes, the killing of T lymphocytes in vivo was 100-fold more efficient than that with the conjugate contg. a nondegradable sequence. The application of such conjugates as drug delivery systems is promising.
IT **57950-81-9DP**, reaction products with antibodies and daunomycin
100424-72-4DP, reaction products with antibodies and daunomycin
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and biol. properties of, for drug targeting)
RN 57950-81-9 HCAPLUS
CN Glycine, N-(2-methyl-1-oxo-2-propenyl)glycyl-, 4-nitrophenyl ester, polymer with N-(2-hydroxypropyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

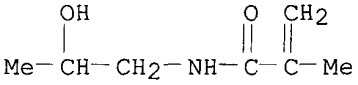
CM 1

CRN 57950-79-5
CMF C14 H15 N3 O6



CM 2

CRN 21442-01-3
CMF C7 H13 N O2

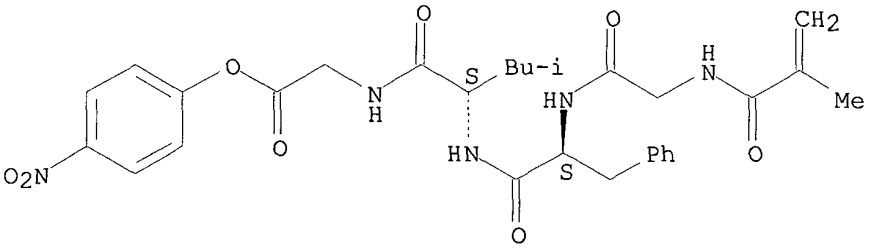


RN 100424-72-4 HCAPLUS
CN Glycine, N-(2-methyl-1-oxo-2-propenyl)glycyl-L-phenylalanyl-L-leucyl-, 4-nitrophenyl ester, polymer with N-(2-hydroxypropyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

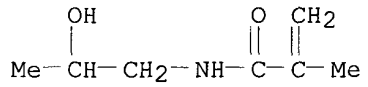
CRN 100424-71-3
CMF C29 H35 N5 O8
CDES 5:L,L

Absolute stereochemistry.



CM 2

CRN 21442-01-3
CMF C7 H13 N O2



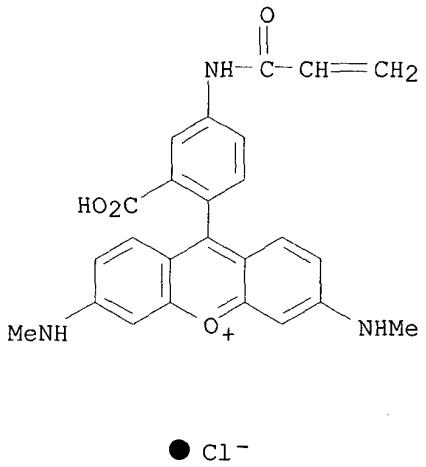
L68 ANSWER 6 OF 7 HCAPLUS COPYRIGHT 2001 ACS
AN 1968:437118 HCAPLUS
DN 69:37118
TI Polymeric xanthene dyes
IN Tadao, Ida; Takahashi, Shoji; Hashimoto, Takeyuki; Matsuzaki, Shigeyuki
PA Tanabe Seiyaku Co., Ltd.
SO Japan., 7 pp.
CODEN: JAXXAD
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 43008956	B4	19680411	JP	19640808

GI For diagram(s), see printed CA Issue.
AB A mixt. of 29 g. I (R = m-CH2:CHC6H4NHCO in 3-position), 22 g. m-C6H4(OH)2 (II), and 10 g. ZnCl2 was heated at 160.degree. for 3 hrs. and repptd. from MeOH with Et2O to give 42.5 g. III, which was polymd. with 18 g. styrene and 0.6 g. Bz2O2 in 200 ml. HCONMe2 (DMF) at 60.degree. for 44 hrs. and poured into MeOH. The solid was dissolved in 300 ml. H2O contg. 14 g. NaOH and salted to give 55 g. yellow dye. Similarly, the following polymeric dyes were prepd. from I (R in 4-position) (R, phenol, polymn. conditions, after-treatment, and color given): p-CH2:CHC6H4CONH, II, 70.degree. for 20 hrs. in DMF with azodiisobutyronitrile (IV), -, yellowish brown (Na salt); CH2:CHCONH, II, 70.degree. with IV, bromination (tetrabromide), -; CH2:CMeCO2,2,4,1,3-I2C6H2(OH)2, -, -, black-red; p-CH2:CHC6H4O2C, m-Et2NC6H4OH (V), 70.degree. for 10 hrs. in EtOH with IV, -, reddish black-brown (hydrochloride); CH2:CHCONH, m-MeNHC6H4OH, -, -, black-red; CH2:CHO, V, 0.degree. for 20 hrs. in PhMe with BuLi, sulfonation at 60.degree. with fuming H2SO4, red (sulfate) or reddish black (Na salt, more H2O-sol.).
IT **29224-96-2P**
RL: IMF (Industrial manufacture); PREP (Preparation)
(prepn. of)
RN 29224-96-2 HCAPLUS
CN Xanthylium, 9-[2-carboxy-4-[(1-oxo-2-propenyl)amino]phenyl]-3,6-bis(methylamino)-, chloride, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 47699-94-5
CMF C25 H22 N3 O4 . Cl



● Cl^-

L68 ANSWER 7 OF 7 HCAPLUS COPYRIGHT 2001 ACS
AN 1967:54119 HCAPLUS
DN 66:54119
TI Blood-brain barrier changes associated with unilateral cerebral angiography
AU Harrington, G.; Michie, C.; Lynch, P. R.; Russell, M. A.; Oppenheimer, Morton J.
CS Univ. New South Wales, Sydney, Australia
SO Invest. Radiol. (1966), 1(6), 431-40
CODEN: INVRAV
DT Journal
LA English
AB To determine min. signs of toxicity in water-sol. contrast media when used in a simulated cerebral angiogram, the effects of these media on blood pressure, cerebrospinal fluid pressure, and fluorescent staining of the brain in anesthetized dogs were studied. A roentgenogram of the head and neck was taken during the injection of radiopaque media. After 10 min., 50 mg./kg. of Na **fluorescein** was given i.v. At the end of 1 hr. the brain was sectioned, examd., and photographed under fluorescent light. Following injections of contrast material or hypertonic saline, there was a change in blood-brain barrier permeability and an increase in spinal fluid pressure in a large percent of the animals examd. When the range of max. change of cerebrospinal fluid pressure and the degree of fluorescent staining, where staining was present, were used as criteria for toxicity, Conray 60% (methylglucamine iothalamate) was considered to be slightly less toxic than Renografin 60% (methylglucamine diatrizoate), Hypaque 50% (Na diatrizoate) or the dimer of Conray-MP 2032. The latter 3 media gave responses similar to each other and to hypertonic saline. When the presence of fluorescence was used in assocn. with cerebrospinal fluid pressure changes as a riterionc of toxicity, Hypaque 50% appeared to be the least toxic.
IT **14897-28-0**

RL: BIOL (Biological study)
(hemato-encephalic barrier permeability response to, in angiography)
RN 14897-28-0 HCAPLUS

Received 3/20/03

#1

SCHNIZER 09/627,787

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YOU HAVE REQUESTED DATA FROM 11 ANSWERS - CONTINUE? Y/(N):y

L69 ANSWER 1 OF 11 HCAPLUS COPYRIGHT 2001 ACS
AN 2001:519335 HCAPLUS
DN 135:111977
TI Diagnostic/therapeutic agents having phospholipid-based microbubbles coupled to one or more vectors
IN Klaveness, Jo; Rongved, P.ANG.l; Hogset, Anders; Tolleshaug, Helge; Naevestad, Anne; Hellebust, Halldis; Hoff, Lars; Cuthbertson, Alan; Lovhaug, Dagfinn; Solbakken, Magne
PA Nycomed Imaging As, Norway
SO U.S., 89 pp., Cont.-in-part of U.S. Ser. No. 958,993.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 9

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6261537	B1	20010717	US 1997-960054	19971029
	CN 1234742	A	19991110	CN 1997-199047	19971028
PRAI	GB 1996-22366	A	19961028		
	GB 1996-22367	A	19961028		
	GB 1996-22368	A	19961028		
	GB 1997-699	A	19970115		
	GB 1997-8265	A	19970424		
	GB 1997-11842	A	19970606		
	GB 1997-11846	A	19970606		
	US 1997-49264	P	19970606		
	US 1997-49265	P	19970606		
	US 1997-49268	P	19970606		
	US 1997-958993	A2	19971028		

AB Targetable diagnostic and/or therapeutically active agents, e.g. ultrasound contrast agents, having reporters comprise gas-filled microbubbles stabilized by monolayers of film-forming surfactants, the reporter being coupled or linked to at least one vector. The gas is air, nitrogen, oxygen, carbon dioxide, hydrogen, an inert gas, a sulfur fluoride, selenium hexafluoride, a low mol. wt. hydrocarbon, a ketone, an ester, a halogenated low mol. wt. hydrocarbon or their mixts. The film-forming surfactant material is one or more phospholipids selected from the group consisting of phosphatidylserines, phosphatidylglycerols, phosphatidylinositols, phosphatidic acids and cardiolipins. A therapeutic agent is an antineoplastic agent, blood product, biol. response modifier, antifungal agent, hormone or hormone analog, vitamin, enzyme, antiallergic agent, tissue factor inhibitor, platelet inhibitor, coagulation protein target inhibitor, fibrin formation inhibitor, fibrinolysis promoter, antiangiogenic, circulatory drug, metabolic potentiator, antitubercular, antiviral, vasodilator, antibiotic, anti-inflammatory, antiprotozoal, antirheumatic, narcotic, opiate, cardiac glycoside, neuromuscular blocker, sedative, local anesthetic, general anesthetic or genetic material. For example, an endothelial cell adhesion of phosphatidylserine-encapsulated perfluorobutane microbubbles coated with polylysine was higher than adhesion of uncoated microbubbles. Also, a thrombus was detected by

ultrasound in patients with suspected venous thrombosis using i.v. phosphatidylserine-encapsulated microbubbles. The microbubbles contained inactivated human thrombin-succinyl-PEG 3400-distearoylphosphatidylethanol amine incorporated into the encapsulating membrane.

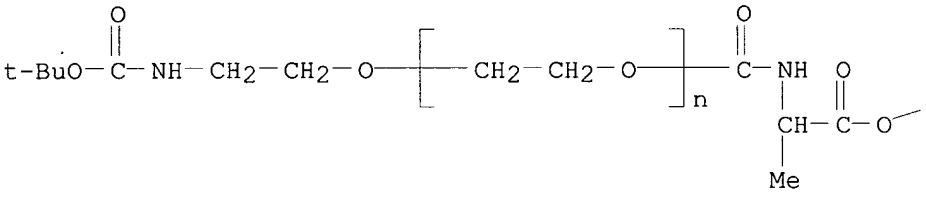
IT **207287-12-5P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of diagnostic/therapeutic agents having phospholipid-based gas-filled microbubbles coupled to one or more vectors)

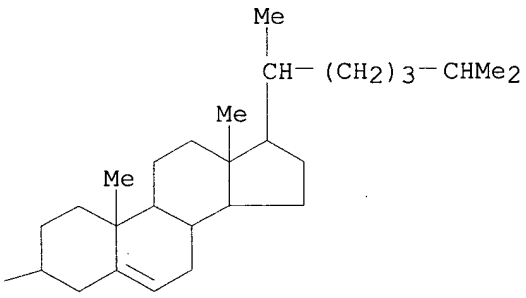
RN 207287-12-5 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-[[[2-[(3.beta.)-cholest-5-en-3-yloxy]-1-methyl-2-oxoethyl]amino]carbonyl]-.omega.-[2-[[(1,1-dimethylethoxy)carbonyl]amino]ethoxy]-, (S)- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



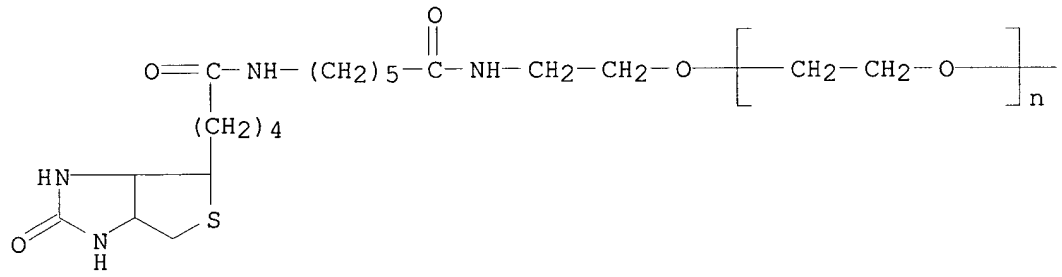
IT **207287-14-7P 207287-32-9P**

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of diagnostic/therapeutic agents having phospholipid-based gas-filled microbubbles coupled to one or more vectors)

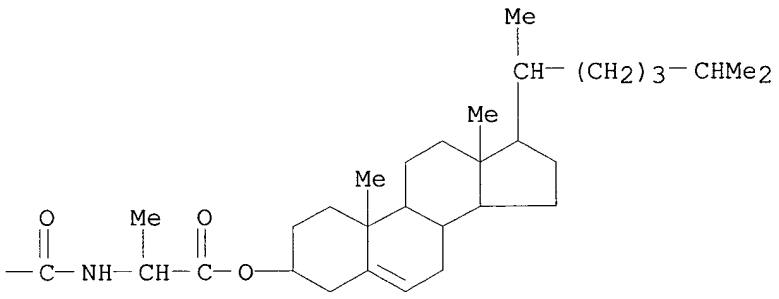
RN 207287-14-7 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),
.alpha.-[[[2-[(3.beta.)-cholest-5-en-3-yloxy]-1-
methyl-2-oxoethyl]amino]carbonyl]-.omega.-[2-[[6-[[5-(hexahydro-2-oxo-1H-
thieno[3,4-d]imidazol-4-yl)-1-oxopentyl]amino]-1-oxohexyl]amino]ethoxy]-,
stereoisomer (9CI) (CA INDEX NAME)

PAGE 1-A

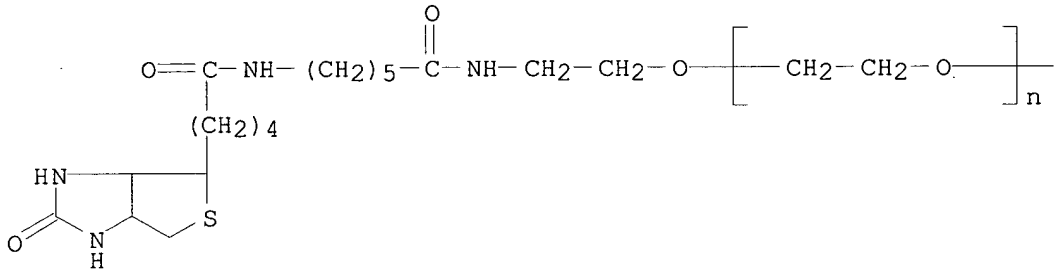


PAGE 1-B

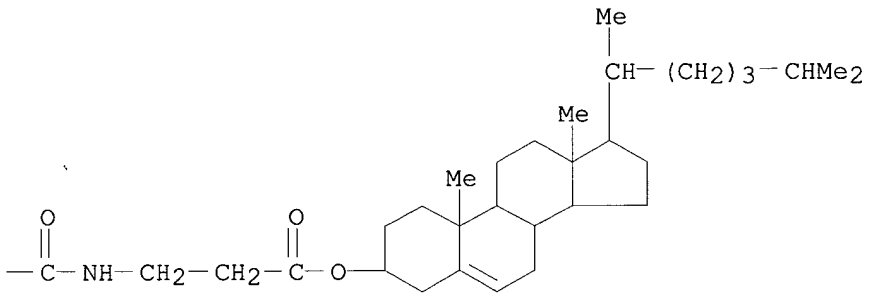


RN 207287-32-9 HCAPLUS
CN Poly(oxy-1,2-ethanediyl),
.alpha.-[[[3-[(3.beta.)-cholest-5-en-3-yloxy]-3-
oxopropyl]amino]carbonyl]-.omega.-[2-[[6-[[5-(hexahydro-2-oxo-1H-
thieno[3,4-d]imidazol-4-yl)-1-oxopentyl]amino]-1-oxohexyl]amino]ethoxy]-,
stereoisomer (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



RE.CNT 49
RE
(1) Anon; WO 9115244 1991 HCAPLUS
(2) Anon; WO 9320802 1993 HCAPLUS
(4) Anon; WO 9407539 1994 HCAPLUS
(5) Anon; WO 9428873 1994 HCAPLUS
(6) Anon; WO 9428874 1994 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L69 ANSWER 2 OF 11 HCAPLUS COPYRIGHT 2001 ACS
AN 2000:384558 HCAPLUS
DN 133:28235
TI Preparation of nanoparticles with polymer shells for use in assays
IN Mirkin, Chad A.; Nguyen, Sonbinh T.
PA Nanosphere LLC, USA
SO PCT Int. Appl., 65 pp.
CODEN: PIXXD2

DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000033079	A1	20000608	WO 1999-US28387	19991130

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1135682	A1	20010926	EP 1999-962951	19991130

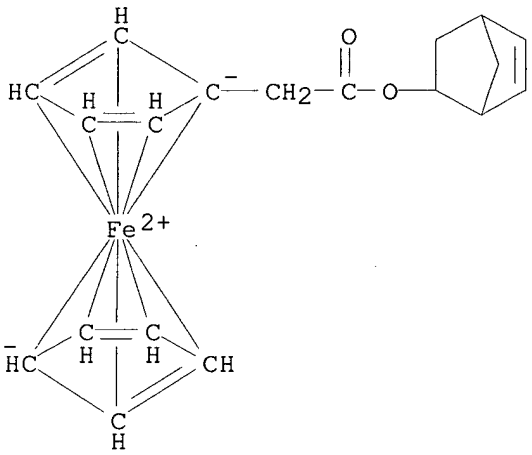
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

PRAI US 1998-110327 P 19981130
WO 1999-US28387 W 19991130
OS MARPAT 133:28235
AB The invention provides a method of prepg. nanoparticles having at least one polymer shell attached to them, each polymer shell having a selected property or properties. The method comprises attaching initiation monomers to the surfaces of the nanoparticles, contacting the nanoparticles having the initiation monomers attached to them with a transition metal ring-opening metathesis catalyst to activate the initiation monomers, and contacting the nanoparticles with one or more types of propagation monomers of the formula P-L-N under conditions effective so that the monomers are polymd. to form the one or more polymer shells. In the formula P-L-N, N is a cyclic olefin-contg. group, P is a moiety which gives each polymer shell a selected property or properties, and L is a bond or linker. The invention also provides polymers formed by polymg. the propagation monomers. The invention further provides the nanoparticles, the initiation monomers, and propagation monomers of formula P-L-N wherein P is a moiety having a property selected from the group consisting of redox activity, optical activity, elec. activity and magnetic activity, and L and N are defined above. The invention also provides binding monomers of formula B-L-N, wherein B is a binding moiety that binds specifically to an analyte, and N and L are defined above. Finally, the invention provides methods and kits for detecting or quantitating an analyte.
IT **220577-93-5DP**, gold nanoparticle-immobilized
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of nanoparticles with polymer shells for use in assays)
RN 220577-93-5 HCAPLUS
CN Ferrocene, [[(1R,2S,4R)-bicyclo[2.2.1]hept-5-en-2-yloxy]carbonyl]-, rel-, polymer with rel-[2-[(1R,2S,4R)-bicyclo[2.2.1]hept-5-en-2-yloxy]-2-oxoethyl]ferrocene (9CI) (CA INDEX NAME)

CM 1

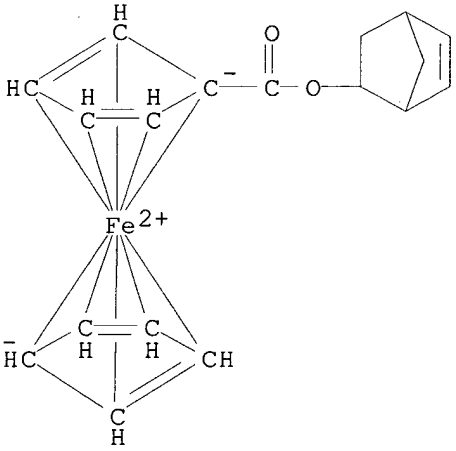
CRN 220577-89-9
CMF C19 H20 Fe O2

CCI CCS
CDES 2:EXO



CM 2

CRN 220577-87-7
CMF C18 H18 Fe O2
CCI CCS
CDES 2:EXO



RE.CNT 8
RE
(1) Akasaki; US 4846893 A 1989 HCAPLUS
(3) Goto; US 5053471 A 1991 HCAPLUS
(4) Grubbs; US 5342909 A 1994 HCAPLUS
(6) Perronin; US 4023981 A 1977 HCAPLUS
(7) Siiman; US 5639620 A 1997 HCAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L69 ANSWER 3 OF 11 HCAPLUS COPYRIGHT 2001 ACS
AN 1999:708651 HCAPLUS
DN 131:319900
TI Diagnostic/therapeutic agents comprising membrane-forming amphiphilic lipopeptide-stabilized gas microbubbles
IN Cuthbertson, Alan; Solbakken, Magne; Wolfe, Henry Raphael
PA Marsden, John Christopher, UK; Nycomed Imaging A/S
SO PCT Int. Appl., 59 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

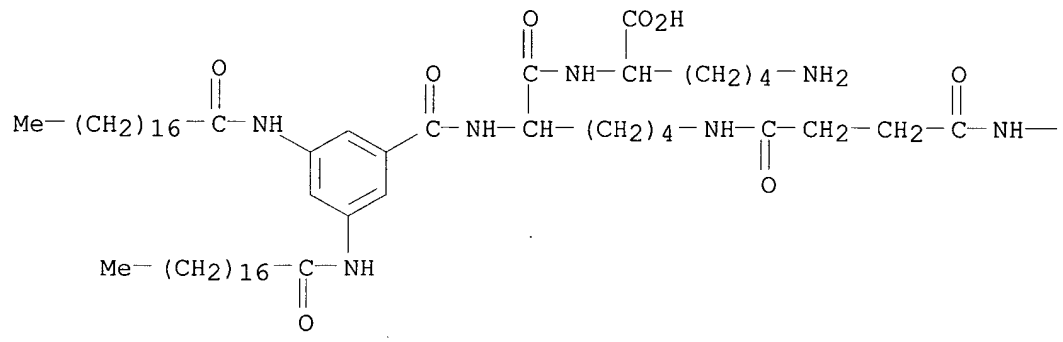
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9955383	A2	19991104	WO 1999-GB1247	19990422
	WO 9955383	A3	20000706		
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	EP 1073475	A2	20010207	EP 1999-918154	19990422
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	AU 9936187	A1	19991116	AU 1999-36187	19990423
	NO 2000005382	A	20001218	NO 2000-5382	20001026
PRAI	GB 1998-9084	A	19980428		
	WO 1999-GB1247	W	19990422		

AB Novel membrane-forming amphiphilic lipopeptides comprise one or more peptide moieties contg. 2-50 aminoacyl residues and one or more hydrocarbon chains contg. 5-50 carbon atoms. Such lipopeptides may be used in the formation of stabilized gas microbubble dispersions suitable for use as diagnostic and/or therapeutic agents, for example as ultrasound contrast agents. Perfluorobutane-contg. microbubbles were prepd. that used N-[3-(2-aminoethanamido)-5-[2-(n-hexadecyl)octadecanamido]benzoyl]glycine (prepn. given) as the membrane-forming agent.

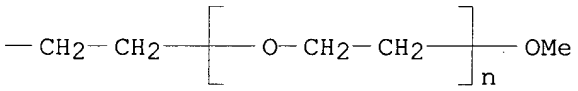
IT **248602-54-2P**
RL: ARG (Analytical reagent use); SPN (Synthetic preparation); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(diagnostic/therapeutic agents comprising membrane-forming amphiphilic lipopeptide-stabilized gas microbubbles)

RN 248602-54-2 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-methoxy-.omega.-hydroxy-, ether with N2-[3,5-bis[(1-oxooctadecyl)amino]benzoyl]-N6-[4-[(2-hydroxyethyl)amino]-1,4-dioxobutyl]-L-lysyl-L-lysine (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L69 ANSWER 4 OF 11 HCAPLUS COPYRIGHT 2001 ACS
AN 1999:20847 HCAPLUS
DN 130:193938
TI Carbohydrate-based probes for detection of cellular lectins
AU Galanina, Oxana E.; Tuzikov, Alexander B.; Rapoport, Evgenia; Le Pendu, Jacques; Bovin, Nicolai V.
CS Shemyakin Institute of Bioorganic Chemistry, Russian Academy of Sciences, Moscow, 117871, Russia
SO Anal. Biochem. (1998), 265(2), 282-289
CODEN: ANBCA2; ISSN: 0003-2697
PB Academic Press
DT Journal
LA English
AB Carbohydrate (spacered saccharide residue, Glyc) probes with various tags were synthesized as anal. tools for study of cellular lectins, i.e., Glyc-polyacrylamide-3H, Glyc-PAA-biotin, Glyc-PAA-**fluorescein** (flu), and Glyc-PAA-digoxigenin, where PAA is a sol. polyacrylamide carrier of .apprxeq.30 kDa. Binding of all types of probes, where Glyc is the sialyl Lewis X (SiaLeX) tetrasaccharide or a blank saccharide, was assessed using Chinese hamster ovary (CHO) cells either transfected with the E-selectin cDNA or mock-transfected. High binding of SiaLeX-PAA-3H to E-selectin-transfected cells and absence of binding to control cells (both native and permeabilized) allowed the conclusion that the polyacrylamide carrier and the spacer arm do not contribute significantly to the binding. The biotinylated probe showed a high level of nonspecific binding in cell

enzyme-linked assays. A similarly built digoxigenin-labeled probe was significantly better. In flow cytometry assays, the **fluorescein** probe demonstrated a specific binding to E-selectin-transfected cells of a similar level to that given by an anti-E-selectin antibody. In addn., it could be inhibited by the anti-E-selectin antibody, further demonstrating specificity. Tumors were obtained from nude mice by injection of CHO E-selectin or mock-transfected cells. The fluorescent SiaLeX-PAA-flu probe could bind to tumor sections from E-selectin-pos. CHO cells, but not from control CHO cells. These probes can thus be used to reveal specifically complex carbohydrate-binding sites on cells either in culture or on tissue sections. (c) 1998 Academic Press.

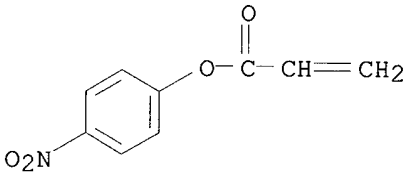
IT **67391-52-0D**, Poly(4-nitrophenylacrylate), conjugate with sialyl Lewis X and biotin/digoxigenin
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(probe; carbohydrate-based probes for detection of cellular lectins)

RN 67391-52-0 HCAPLUS

CN 2-Propenoic acid, 4-nitrophenyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 2123-85-5
CMF C9 H7 N O4



RE.CNT 16

RE

(1) Adam, A; J Pharm Biomed Anal 1996, V15, P13 HCAPLUS
(2) Bovin, N; Glycoconj J 1993, V10, P142 HCAPLUS
(4) Bovin, N; Glycoconj J 1998, V15, P431 HCAPLUS
(5) Bovin, N; Rev Chem Soc 1995, V24, P413 HCAPLUS
(6) Carlos, T; Blood 1994, V84, P2068 HCAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L69 ANSWER 5 OF 11 HCAPLUS COPYRIGHT 2001 ACS
AN 1998:304262 HCAPLUS
DN 129:2225
TI Contrast agents
IN Klaveness, Jo; Naevestad, Anne; Cuthbertson, Alan
PA Nycomed Imaging A/S, Norway; Cockbain, Julian; Klaveness, Jo; Naevestad, Anne; Cuthbertson, Alan
SO PCT Int. Appl., 99 pp.
CODEN: PIXXD2
DT Patent

LA English
FAN.CNT 9

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9818496	A2	19980507	WO 1997-GB2956	19971028
	W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9747868	A1	19980522	AU 1997-47868	19971028
	EP 971747	A2	20000119	EP 1997-910516	19971028
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	US 6264914	B1	20010724	US 1999-300434	19990428
	US 2001016587	A1	20010823	US 2001-785177	20010220
PRAI	GB 1996-22364	A	19961028		
	GB 1996-22365	A	19961028		
	GB 1996-22366	A	19961028		
	GB 1996-22367	A	19961028		
	GB 1996-22368	A	19961028		
	GB 1996-22369	A	19961028		
	GB 1997-699	A	19970115		
	GB 1997-2195	A	19970204		
	GB 1997-6063	A	19970324		
	US 1997-58247	P	19970909		
	WO 1997-GB2956	W	19971028		
	US 1999-300434	A3	19990428		

OS MARPAT 129:2225

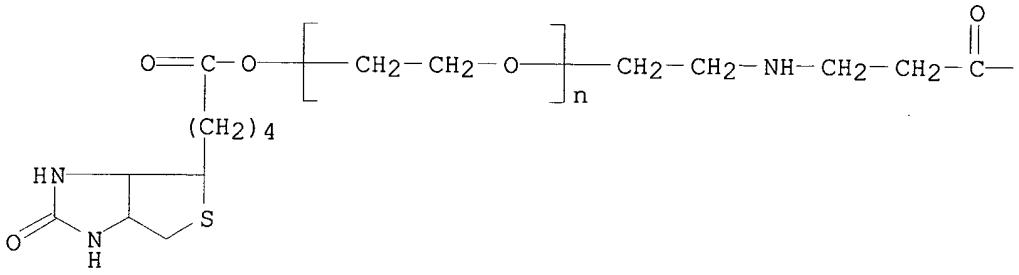
AB The invention provides a compn. of matter (I): V-L-R where V is an org. group having binding affinity for an angiotensin II receptor site, L is a linker moiety or a bond, and R is a moiety detectable in in vivo imaging of a human or animal body, with the provisos that where V is angiotensin or a peptidic angiotensin deriv. or analog then V-L-R is other than a nonmetal radionuclide substituted peptide (e.g. 125I substituted angiotensin II) and L-V is other than simply a peptide with a chelating agent amide bonded to a side chain thereof. This compn. of matter may be used to image cardiovascular diseases and disorders.

IT **207400-84-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of angiotensin receptor binding contrast agents)

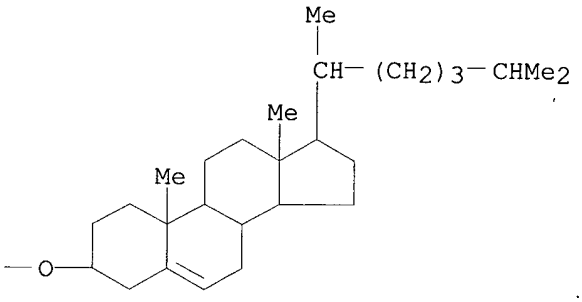
RN 207400-84-8 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),
.alpha.-[2-[[3-[(3.beta.)-cholest-5-en-3-yloxy]-3-oxopropyl]amino]ethyl]-.omega.-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]oxy]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L69 ANSWER 6 OF 11 HCAPLUS COPYRIGHT 2001 ACS
AN 1998:300866 HCAPLUS
DN 129:4872
TI Preparation of targetable diagnostic and therapeutic gas-contg. or gas-generating ultrasound contrast agents
IN Klaveness, Jo; Rongved, Pal; Hogset, Anders; Tolleshaug, Helge; Naevestad, Anne; et al.
PA Marsden, John Christopher, UK; Nycomed Imaging AS; Klaveness, Jo; Rongved, Pal
SO PCT Int. Appl., 205 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 9

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9818501	A2	19980507	WO 1997-GB2954	19971028
	W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9747866	A1	19980522	AU 1997-47866	19971028
	AU 733495	B2	20010517		
	BR 9712683	A	19991019	BR 1997-12683	19971028
	CN 1234742	A	19991110	CN 1997-199047	19971028
	EP 973552	A2	20000126	EP 1997-910514	19971028
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2001503407	T2	20010313	JP 1998-520187	19971028
	NO 9901889	A	19990628	NO 1999-1889	19990421
PRAI	GB 1996-22366	A	19961028		
	GB 1996-22367	A	19961028		
	GB 1996-22368	A	19961028		
	GB 1997-699	A	19970115		
	GB 1997-8265	A	19970424		
	GB 1997-11842	A	19970606		
	GB 1997-11846	A	19970606		
	US 1997-49264	P	19970606		
	US 1997-49265	P	19970606		
	US 1997-49268	P	19970606		
	WO 1997-GB2954	W	19971028		

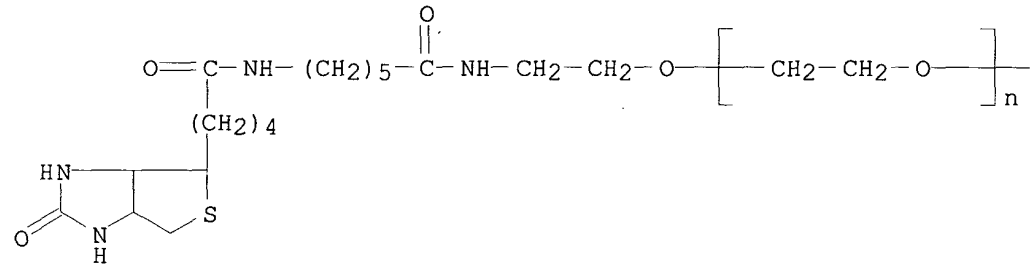
AB Targetable diagnostic and/or therapeutically active agents, e.g. ultrasound contrast agents, comprising a suspension in an aq. carrier liq. of a reporter comprising gas-contg. or gas-generated material, in which the reporter is coupled or linked to one or more non-bioactive vectors. Thus, a mixt. of phosphatidylserine, phosphatidylcholine, and biotinamidocaproate-PEG3400-L-Ala-cholesterol (prepn. given) was dispersed in 5% propylene glycol-water, flushed with perfluorobutane, and sonicated to give gas-filled encapsulated microbubbles.

IT **207287-14-7P 207287-32-9P**
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of targetable diagnostic and therapeutic gas-contg. or gas-generating ultrasound contrast agents linked to non-bioactive vectors)

RN 207287-14-7 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-[[[2-[(3.beta.)-cholest-5-en-3-yloxy]-1-methyl-2-oxoethyl]amino]carbonyl]-.omega.-[2-[[6-[[5-(hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl)-1-oxopentyl]amino]-1-oxohexyl]amino]ethoxy]-, stereoisomer (9CI) (CA INDEX NAME)

PAGE 1-A



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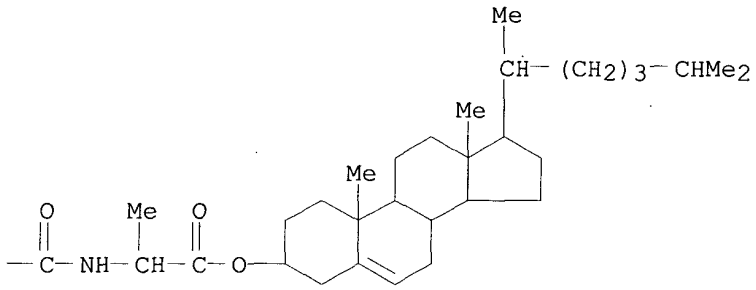
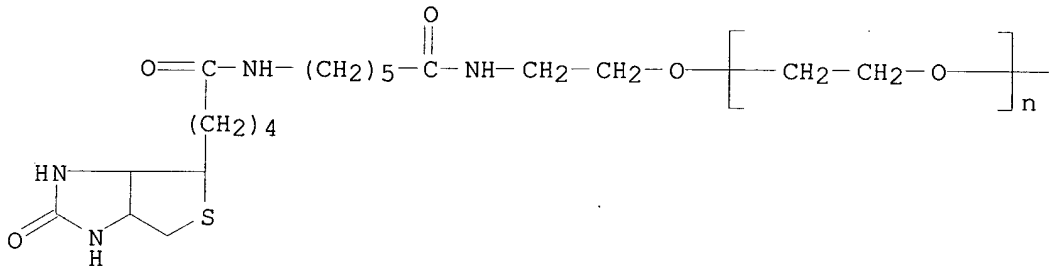
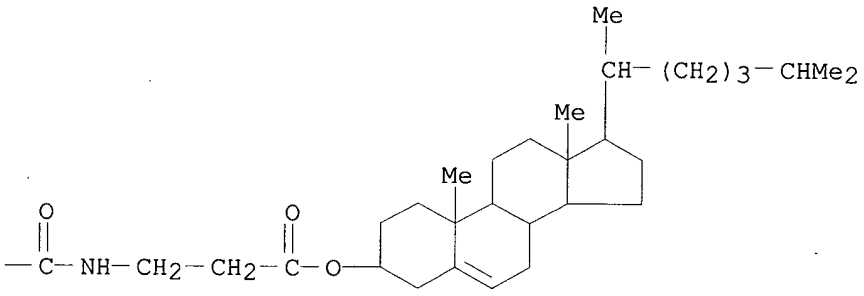


RN 207287-32-9 HCAPLUS
CN Poly(oxy-1,2-ethanediyl),
.alpha.-[[[3-[(3.beta.)-cholest-5-en-3-yloxy]-3-
oxopropyl]amino]carbonyl]-.omega.-[2-[[6-[[5-(hexahydro-2-oxo-1H-
thieno[3,4-d]imidazol-4-yl)-1-oxopentyl]amino]-1-oxohexyl]amino]ethoxy]-,
stereoisomer (9CI) (CA INDEX NAME)

PAGE 1-A

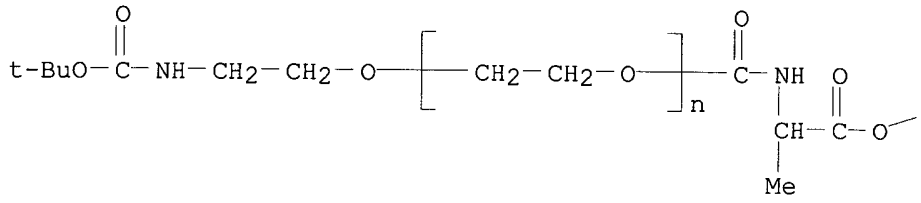


PAGE 1-B



IT **207287-12-5P 207287-13-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of targetable diagnostic and therapeutic gas-contg. or gas-generating ultrasound contrast agents linked to non-bioactive vectors)
RN 207287-12-5 HCAPLUS
CN Poly(oxy-1,2-ethanediyl),
.alpha.-[[[2-[(3.beta.)-cholest-5-en-3-yloxy]-1-methyl-2-oxoethyl]amino]carbonyl]-.omega.-[2-[[(1,1-dimethylethoxy)carbonyl]amino]ethoxy]-, (S)- (9CI) (CA INDEX NAME)

PAGE 1-A



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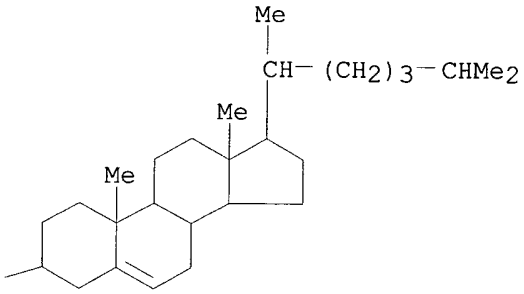
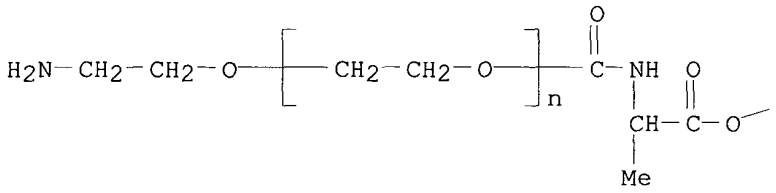
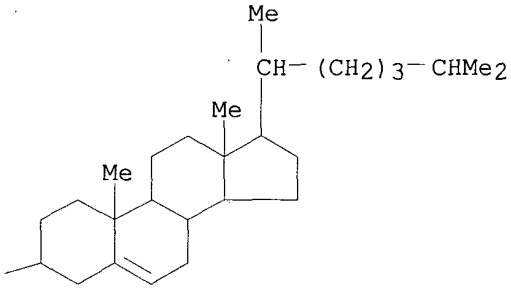


RN 207287-13-6 HCAPLUS
CN Poly(oxy-1,2-ethanediyl),
.alpha.-[[[2-[(3.beta.)-cholest-5-en-3-yloxy]-1-
methyl-2-oxoethyl]amino]carbonyl]-.omega.-(2-aminoethoxy)-, (S)- (9CI)
(CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L69 ANSWER 7 OF 11 HCAPLUS COPYRIGHT 2001 ACS
AN 1998:204002 HCAPLUS
DN 128:326418
TI Targetable HPMA copolymer-adriamycin conjugates. Recognition, internalization, and subcellular fate
AU Omelyanenko, V.; Kopeckova, P.; Gentry, C.; Kopecek, J.
CS Departments of Pharmaceutics and Pharmaceutical Chemistry/CCCD, University of Utah, Salt Lake City, UT, 84112, USA
SO J. Controlled Release (1998), 53(1-3), 25-37
CODEN: JCREEC; ISSN: 0168-3659
PB Elsevier Science B.V.
DT Journal
LA English
AB Recognition, internalization, and subcellular trafficking of N-(2-hydroxypropyl)methacrylamide (HPMA) copolymer conjugates contg. N-acylated galactosamine (GalN) or monoclonal OV-TL16 antibodies (Ab) have been investigated in human hepatocarcinoma HepG2 and ovarian carcinoma OVCAR-3 cells, resp. The intrinsic fluorescence of **fluorescein**

or adriamycin (ADR) attached to HPMA copolymers permitted us to follow the subcellular fate of HPMA copolymer conjugates by confocal fluorescence microscopy and fluorescence spectroscopy. The pattern of fluorescence during incubation of HPMA copolymer-ADR-GalN conjugate contg. lysosomally degradable tetrapeptide (GFLG) side-chains with HepG2 cells was consistent with conjugate recognition, internalization, localization in lysosomes, followed by the release of ADR from the polymer chains and ultimately diffusion via the cytoplasm into the cell nuclei. A similar pattern was obsd. in OVCAR-3 cells for Ab targeted HPMA copolymer conjugates. To test our hypothesis that HPMA-copolymer-bound anticancer drugs will be inaccessible to the energy-driven P-glycoprotein efflux pump in multidrug resistant (MDR) cells, we have compared the internalization of the HPMA copolymer-ADR conjugates by sensitive (A2780) and ADR-resistant (A2780/AD) ovarian carcinoma cell lines. Preliminary data on relative retention of ADR in MDR (A2780/AD) cells indicate a higher intracellular ADR concn. after incubation with HPMA copolymer-ADR conjugate when compared to incubation with free (unbound) ADR.

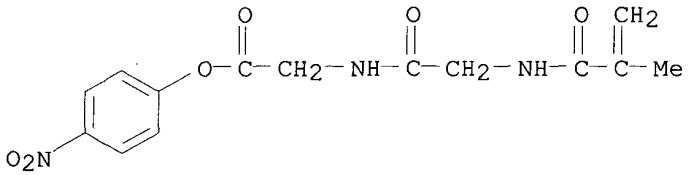
IT **57950-81-9DP**, reaction products with adriamycin and antibodies
100424-72-4DP, reaction products with adriamycin and antibodies
206868-51-1DP, reaction products with adriamycin
206868-52-2DP, reaction products with adriamycin
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn., recognition, internalization and subcellular fate of methacrylamide polymer-adriamycin conjugates)

RN 57950-81-9 HCAPLUS

CN Glycine, N-(2-methyl-1-oxo-2-propenyl)glycyl-, 4-nitrophenyl ester, polymer with N-(2-hydroxypropyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

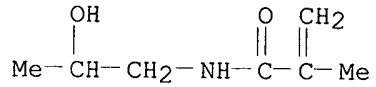
CM 1

CRN 57950-79-5
CMF C14 H15 N3 O6



CM 2

CRN 21442-01-3
CMF C7 H13 N O2

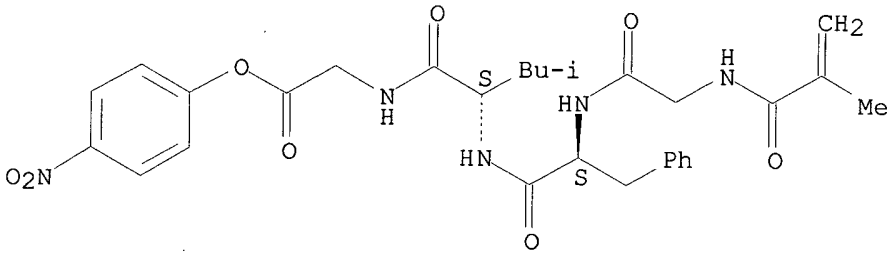


RN 100424-72-4 HCAPLUS
CN Glycine, N-(2-methyl-1-oxo-2-propenyl)glycyl-L-phenylalanyl-L-leucyl-, 4-nitrophenyl ester, polymer with N-(2-hydroxypropyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

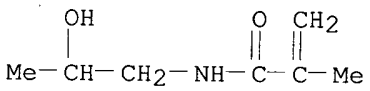
CRN 100424-71-3
CMF C29 H35 N5 O8
CDES 5:L,L

Absolute stereochemistry.



CM 2

CRN 21442-01-3
CMF C7 H13 N O2

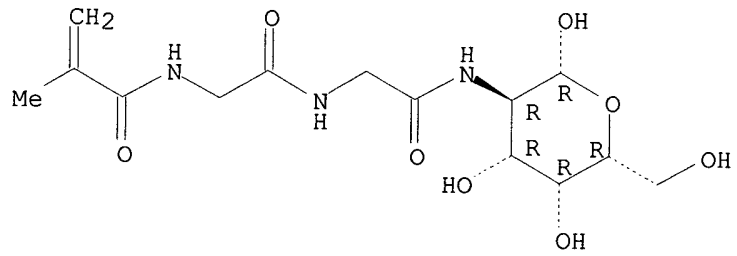


RN 206868-51-1 HCAPLUS
CN Glycine, N-(2-methyl-1-oxo-2-propenyl)glycyl-, 4-nitrophenyl ester, polymer with
2-deoxy-2-[[N-(2-methyl-1-oxo-2-propenyl)glycylglycyl]amino]-.beta.-D-galactopyranose and N-(2-hydroxypropyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

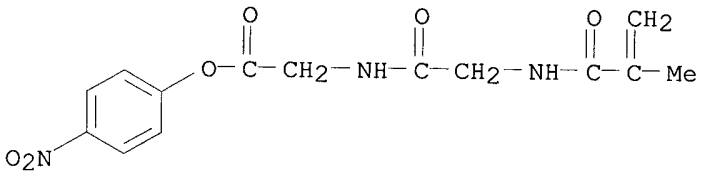
CRN 206868-50-0
CMF C14 H23 N3 O8

Absolute stereochemistry.



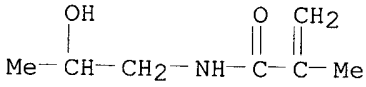
CM 2

CRN 57950-79-5
CMF C14 H15 N3 O6



CM 3

CRN 21442-01-3
CMF C7 H13 N O2

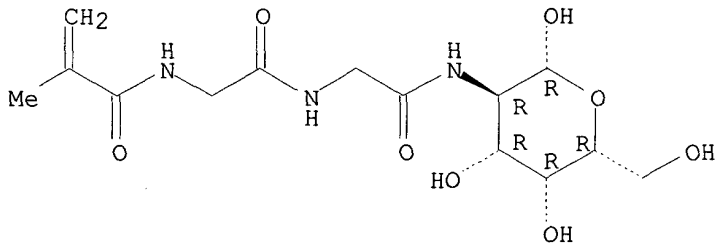


RN 206868-52-2 HCAPLUS
CN 2-5-Tachykinin-related peptide Ib (Cancer borealis), N-(2-methyl-1-oxo-2-propenyl)-, 4-nitrophenyl ester, polymer with 2-deoxy-2-[[N-(2-methyl-1-oxo-2-propenyl)glycylglycyl]amino]-.beta.-D-galactopyranose and N-(2-hydroxypropyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 206868-50-0
CMF C14 H23 N3 O8

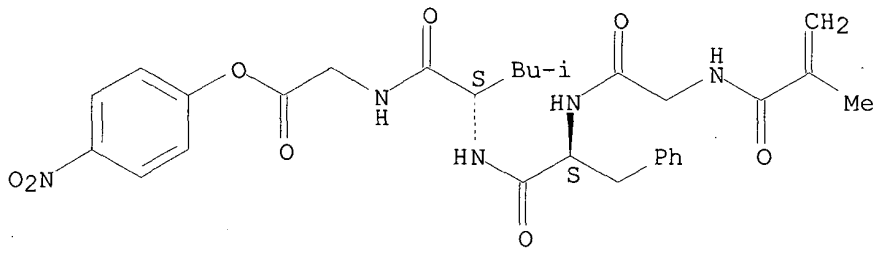
Absolute stereochemistry.



CM 2

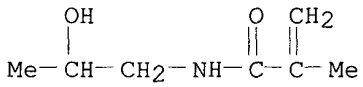
CRN 100424-71-3
CMF C29 H35 N5 O8
CDES 5:L,L

Absolute stereochemistry.



CM 3

CRN 21442-01-3
CMF C7 H13 N O2

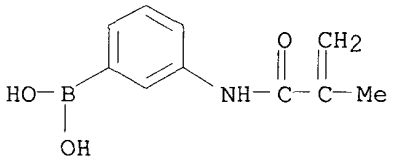


L69 ANSWER 8 OF 11 HCAPLUS COPYRIGHT 2001 ACS
AN 1994:517466 HCAPLUS
DN 121:117466
TI Preparation and characterization of a glucose-responsive insulin-releasing
polymer device
AU Shiino, Daijiro; Murata, Yoshishige; Kataoka, Kazunori; Koyama, Yoshiyuki;
Yokoyama, Masayuki; Okano, Teruo; Sakurai, Yasuhisa
CS Int. Cent. Biomater. Sci., Noda., 278, Japan
SO Biomaterials (1994), 15(2), 121-8

CODEN: BIMADU; ISSN: 0142-9612
DT Journal
LA English
AB A new glucose-responsive insulin delivery system composed of phenylboronic acid (PBA) groups was prepd. and investigated. Complexation of various diol-contg. mols. with PBA gel beads was evaluated using frontal chromatog. The structural features of the diol-contg. mols. strongly influenced their binding to PBA gels beads. In particular, open-chain monosaccharides demonstrated higher assocn. consts. (ca 9.5 .times. 102 to 5.1 .times. 103 l/mol) than glucose (ca 6.3 .times. 102 l/mol). Furthermore, a model system utilizing a fluorescent deriv. of tris(hydroxymethyl)aminomethane was synthesized and bound to PBa gel beads. The mols. were released in a pulsatile manner in response to glucose. In addn., gluconic acids were chem. attached to insulin mols. The modified insulin, contg. two gluconic acid units per insulin mol., was isolated using ion-exchange chromatog. This gluconic acid-modified insulin (G-Ins) was bound onto a PBA gel column, and the G-Ins release profile in response to varying glucose concns. was investigated. The results demonstrate that the PBA gel beads release G-Ins in response to glucose concn. Thus, this new system may be applied for self-regulated insulin delivery.
IT **136043-29-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, for glucose-responsive insulin-releasing device)
RN 136043-29-3 HCAPLUS
CN Boronic acid, [3-[(2-methyl-1-oxo-2-propenyl)amino]phenyl]-, polymer with N,N'-methylenebis[2-propenamide] and 2-propenamide (9CI) (CA INDEX NAME)

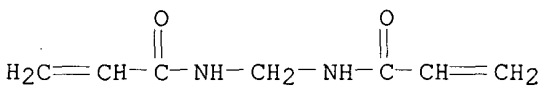
CM 1

CRN 48150-45-4
CMF C10 H12 B N O3



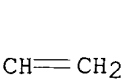
CM 2

CRN 110-26-9
CMF C7 H10 N2 O2



CM 3

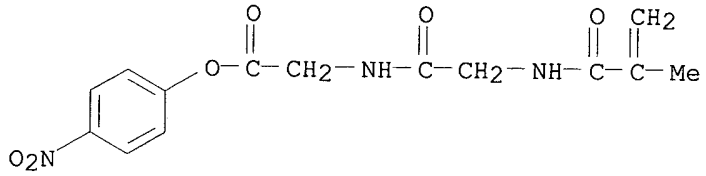
CRN 79-06-1
CMF C3 H5 N O



L69 ANSWER 9 OF 11 HCAPLUS COPYRIGHT 2001 ACS
AN 1989:193552 HCAPLUS
DN 110:193552
TI Optically controlled ligand delivery. 1. Synthesis of water-soluble copolymers containing photocleavable bonds
AU Yen, Hung Ren; Kopecek, Jindrich; Andrade, Joseph D.
CS Dep. Mater. Sci. Eng., Univ. Utah, Salt Lake City, UT, 84112, USA
SO Makromol. Chem. (1989), 190(1), 69-82
CODEN: MACEAK; ISSN: 0025-116X
DT Journal
LA English
AB To verify the possibility of developing a ligand delivery system which is controlled by light pulses, copolymers was synthesized of N-(2-hydroxypropyl)methacrylamide (1) contg. side-chains terminated in ligands (tert-BuO2CNHCH2CO2H, **fluorescein**, tetramethylrhodamine) bound via photocleavable 2-nitrobenzyl groups. Copolymers in soln. were exposed to light of wavelength .apprxeq.360 nm which resulted in release of the bound ligands. Depending on the exptl. conditions (type of solvent, presence of O) changes in the structure of released fluorochromes were obsd. (photofading effect). These effects were quantified by detg. the binding consts. of released modified fluorochromes with monoclonal antifluorescyl antibodies.
IT **57950-81-9DP**, N-(2-Hydroxypropyl)methacrylamide-N-methacryloylglycylglycine-4-nitrophenyl ester copolymer, fluorochrome derivs.
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and photocleavage of, antibody binding in relation to)
RN 57950-81-9 HCAPLUS
CN Glycine, N-(2-methyl-1-oxo-2-propenyl)glycyl-, 4-nitrophenyl ester, polymer with N-(2-hydroxypropyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

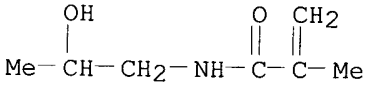
CM 1

CRN 57950-79-5
CMF C14 H15 N3 O6



CM 2

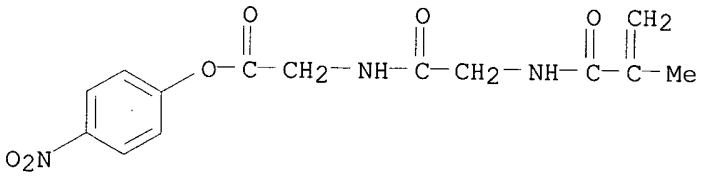
CRN 21442-01-3
CMF C7 H13 N O2



IT **57950-81-9P**, N-(2-Hydroxypropyl)methacrylamide-N-methacryloylglycylglycine-4-nitrophenyl ester copolymer
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and reaction of, with ethylenediamine)
RN 57950-81-9 HCAPLUS
CN Glycine, N-(2-methyl-1-oxo-2-propenyl)glycyl-, 4-nitrophenyl ester, polymer with N-(2-hydroxypropyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

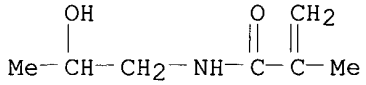
CM 1

CRN 57950-79-5
CMF C14 H15 N3 O6



CM 2

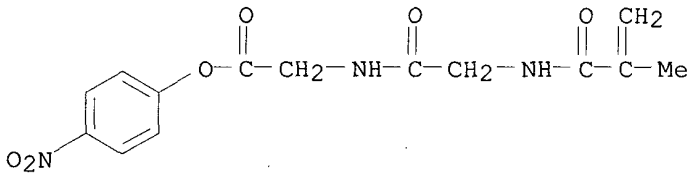
CRN 21442-01-3
CMF C7 H13 N O2



L69 ANSWER 10 OF 11 HCAPLUS COPYRIGHT 2001 ACS
AN 1987:614271 HCAPLUS
DN 107:214271
TI Synthetic water-soluble copolymers for optically-controlled ligand delivery
AU Yen, Hung Ren; Kopecek, Jindrich; Andrade, Joseph D.
CS Dep. Mater. Sci. Eng., Univ. Utah, Salt Lake City, UT, 84112, USA
SO Polym. Mater. Sci. Eng. (1987), 57, 243-7
CODEN: PMSEDG; ISSN: 0743-0515
DT Journal
LA English
AB To verify the possibility of developing a ligand system which is controlled by light pulses, N-(2-hydroxypropyl)methacrylamide copolymers contg. side-chains terminated in ligands (BOC-Gly, **fluorescein**, tetamethylrhodamine) bound via photocleavable 2-nitrobenzyl groups were synthesized. Copolymers in soln. were exposed to light 360 nm which resulted in release of the bound ligand. Depending on the exptl. conditions (type of solvent, presence of oxygen) changes in the structure of released fluorochromes were obsd. (photofading effect). These effects were quantified by detg. the binding consts. of released modified fluorochrome with monoclonal antifluorescyl antibodies.
IT **57950-81-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and reaction of, with ethylenediamine)
RN 57950-81-9 HCAPLUS
CN Glycine, N-(2-methyl-1-oxo-2-propenyl)glycyl-, 4-nitrophenyl ester, polymer with N-(2-hydroxypropyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

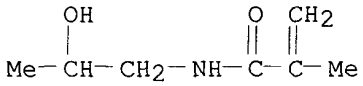
CM 1

CRN 57950-79-5
CMF C14 H15 N3 O6



CM 2

CRN 21442-01-3
CMF C7 H13 N O2

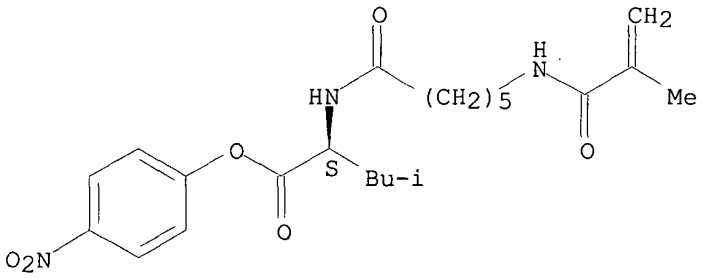


L69 ANSWER 11 OF 11 HCAPLUS COPYRIGHT 2001 ACS
AN 1983:574042 HCAPLUS
DN 99:174042
TI Immunogenicity of N-(2-hydroxypropyl)methacrylamide copolymers - potential
hapten or drug carriers
AU Rihova, B.; Ulbrich, K.; Kopecek, J.; Mancal, P.
CS Inst. Microbiol., Czech. Acad. Sci., Prague, 142 20/4, Czech.
SO Folia Microbiol. (Prague) (1983), 28(3), 217-27
CODEN: FOMIAZ; ISSN: 0015-5632
DT Journal
LA English
AB The title copolymers were nonimmunogenic or only weakly immunogenic in mice. However, when modified with aminophenylarsonic acid or **fluorescein** isothiocyanate, the polymers were immunogenic with the antibodies directed toward the modifying haptenic groups.
IT **64328-80-9D**, reaction products with hexamethylenediamine and 4-aminophenylarsonic acid and **fluorescein** isothiocyanate
RL: BIOL (Biological study)
(immunogenicity of)
RN 64328-80-9 HCAPLUS
CN L-Leucine, N-[6-[(2-methyl-1-oxo-2-propenyl)amino]-1-oxohexyl]-, 4-nitrophenyl ester, polymer with N-(2-hydroxypropyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

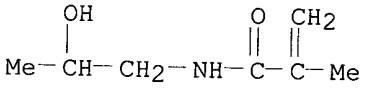
CRN 64325-19-5
CMF C22 H31 N3 O6
CDES 5:L

Absolute stereochemistry.



CM 2

CRN 21442-01-3
CMF C7 H13 N O2



=> d bib abs hitstr 1

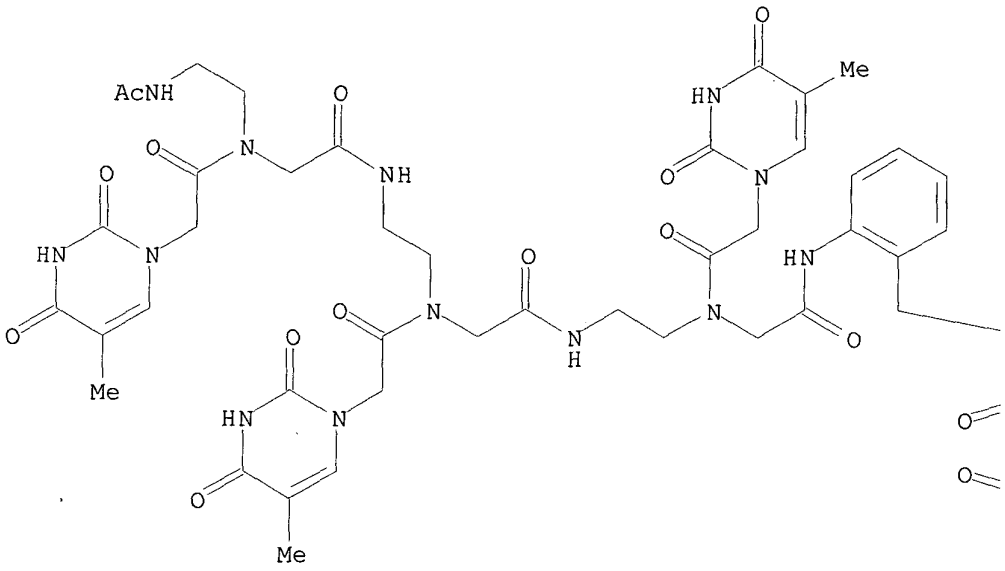
L54 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2001 ACS
AN 2001:294061 HCAPLUS
DN 135:46418
TI Backbone Modifications of Aromatic Peptide Nucleic Acid (APNA) Monomers and Their Hybridization Properties with DNA and RNA
AU Fader, Lee D.; Boyd, Michael; Tsantrizos, Youla S.
CS Department of Chemistry, McGill University, Montreal, QC, H3A 2K6, Can.
SO J. Org. Chem. (2001), 66(10), 3372-3379
CODEN: JOCEAH; ISSN: 0022-3263
PB American Chemical Society
DT Journal
LA English
AB Arom. peptide nucleic acid (APNA) monomers contg. N-(2-aminobenzyl)-glycine, N-(2-aminobenzyl)-(R)- or -(S)-alanine, and N-(2-aminobenzyl)-.beta.-alanine moieties as part of their backbone were synthesized. These novel analogs were incorporated as a single "point mutation" in PNA hexamers, and their physicochem. properties were investigated by UV thermal denaturation and CD expts. Destabilization in triplex formation between the PNA-APNA chimeras and complementary DNA or RNA oligomers was obsd., as compared to the PNA control. The APNA monomer composed of the N-(2-aminobenzyl)-glycine backbone led to the smallest decrease in the thermal stability of the triplexes formed with DNA and RNA, while maintaining selectivity for base-pairing recognition. Since the PNA-APNA chimeras are more lipophilic than the corresponding PNA homopolymers, these oligomers may also exhibit better cell membrane permeability properties.
IT **345201-90-3P 345201-91-4P 345201-92-5P**
345201-93-6P 345201-94-7P 345201-96-9P
345201-97-0P 345201-98-1P 345201-99-2P
345202-00-8P
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. of PNA hexamers contg. arom. substituents and their hybridization properties with DNA or RNA)
RN 345201-90-3 HCAPLUS
CN Peptide nucleic acid, (acetyl-T-T-T-[N-[(2-aminophenyl)methyl]]T-T-T)-Lys-NH2, complex with 5'-adenylic acid homopolymer (1:1) (9CI) (CA INDEX NAME)

CM 1

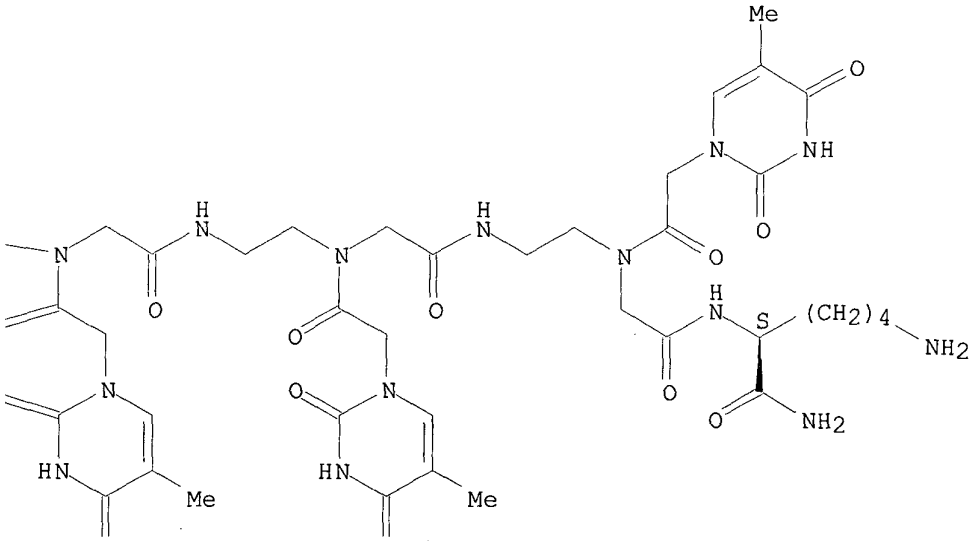
CRN 345201-84-5
CMF C79 H103 N27 O26

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



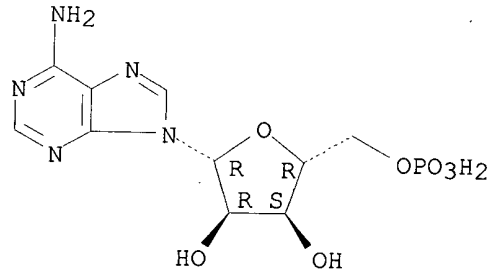
CM 2

CRN 24937-83-5
CMF (C10 H14 N5 O7 P)x
CCI PMS

CM 3

CRN 61-19-8
CMF C10 H14 N5 O7 P
CDES 5:B-D-RIBO

Absolute stereochemistry.



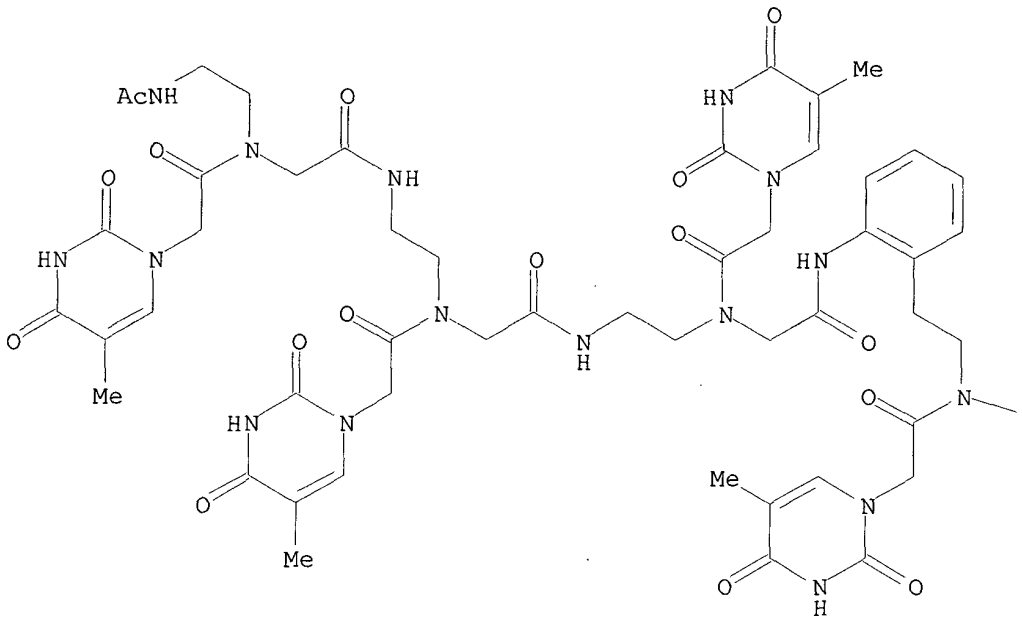
RN 345201-91-4 HCAPLUS
CN Peptide nucleic acid,
(acetyl-T-T-T-[N-[2-(2-aminophenyl)ethyl]]T-T-T)-Lys-
NH2, complex with 5'-adenylic acid homopolymer (1:1) (9CI) (CA INDEX NAME)

CM 1

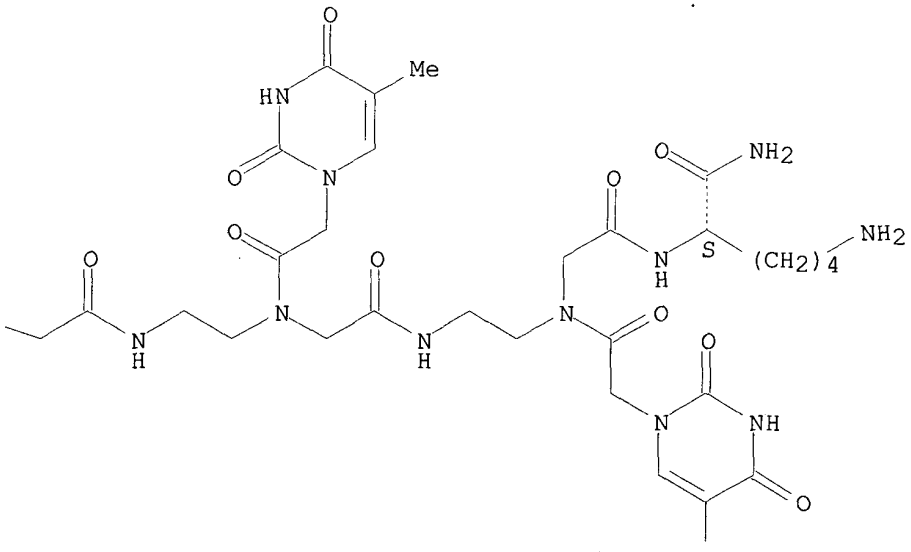
CRN 345201-85-6
CMF C80 H105 N27 O26

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



Me

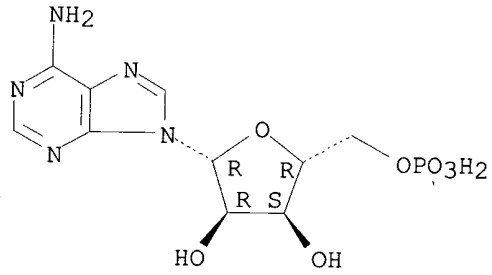
CM 2

CRN 24937-83-5
CMF (C10 H14 N5 O7 P)x
CCI PMS

CM 3

CRN 61-19-8
CMF C10 H14 N5 O7 P
CDES 5:B-D-RIBO

Absolute stereochemistry.



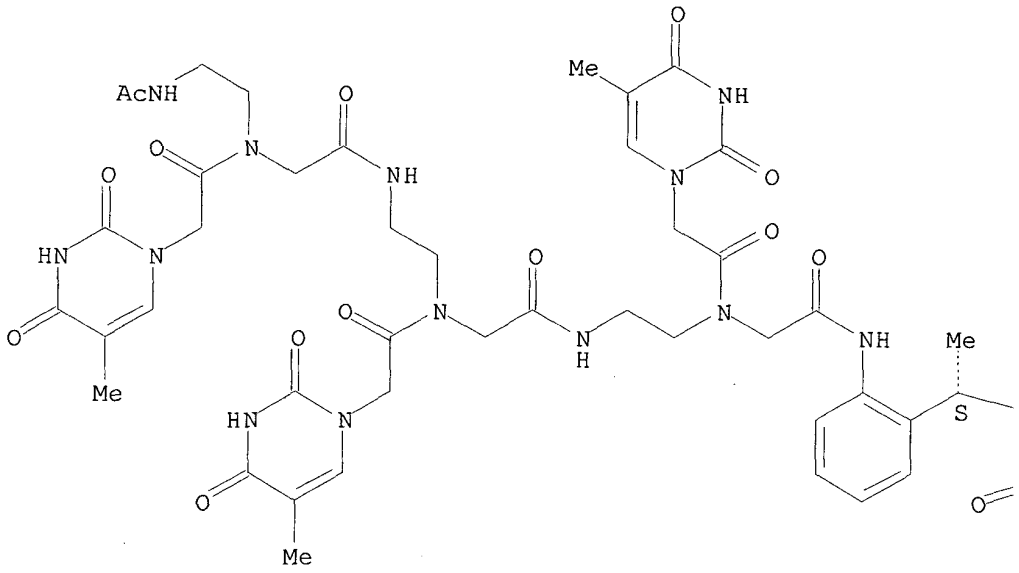
RN 345201-92-5 HCAPLUS
CN Peptide nucleic acid, (acetyl-T-T-T-[N-[(1S)-1-(2-aminophenyl)ethyl]]T-T-T)-Lys-NH2, complex with 5'-adenylic acid homopolymer (1:1) (9CI) (CA INDEX NAME)

CM 1

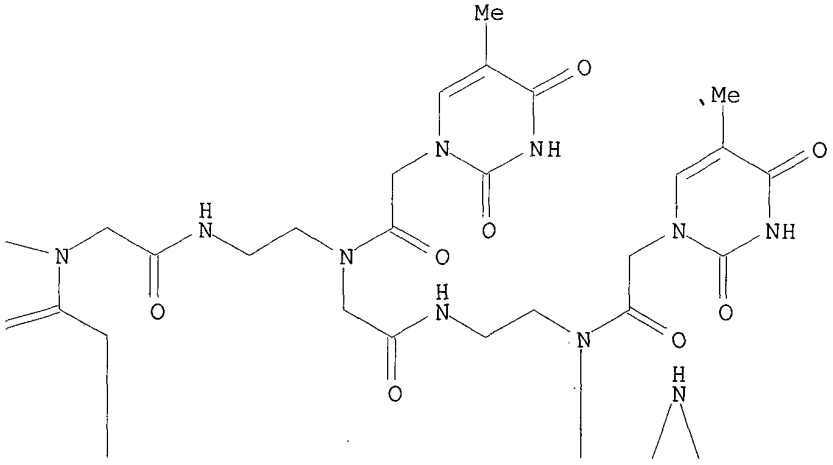
CRN 345201-86-7
CMF C80 H105 N27 O26

Absolute stereochemistry.

PAGE 1-A

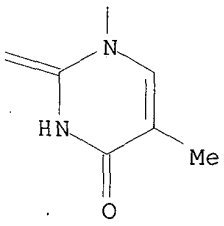


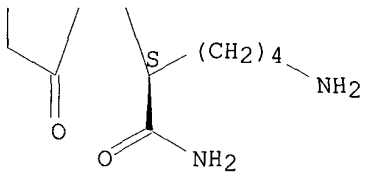
PAGE 1-B



PAGE 2-A

PAGE 2-B





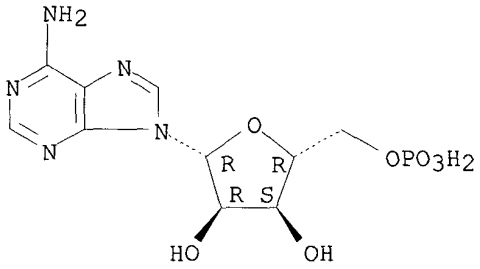
CM 2

CRN 24937-83-5
CMF (C10 H14 N5 O7 P)x
CCI PMS

CM 3

CRN 61-19-8
CMF C10 H14 N5 O7 P
CDES 5:B-D-RIBO

Absolute stereochemistry.



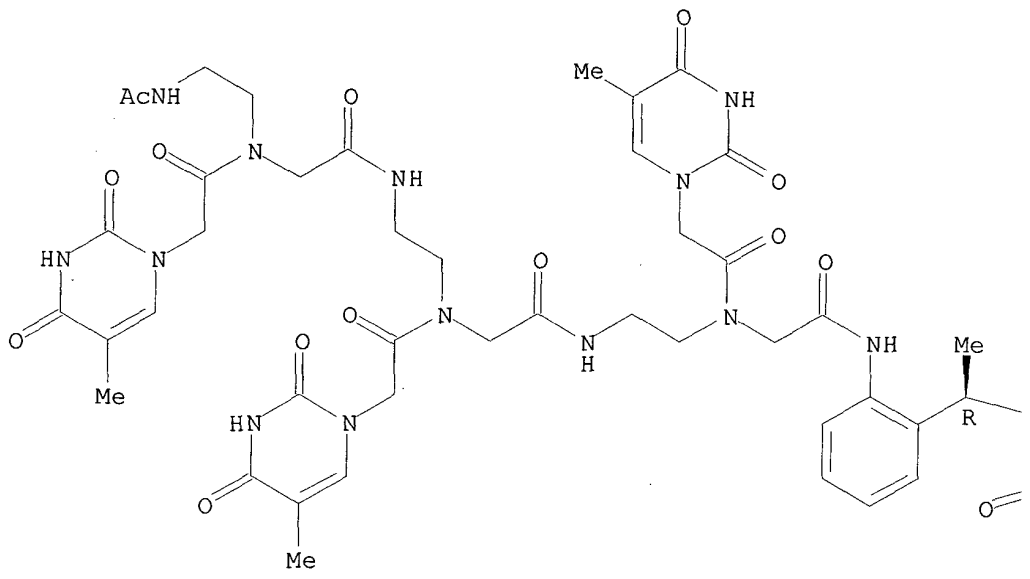
RN 345201-93-6 HCAPLUS
CN Peptide nucleic acid, (acetyl-T-T-T-[N-[(1R)-1-(2-aminophenyl)ethyl]]T-T-T)-Lys-NH2, complex with 5'-adenylic acid homopolymer (1:1) (9CI) (CA INDEX NAME)

CM 1

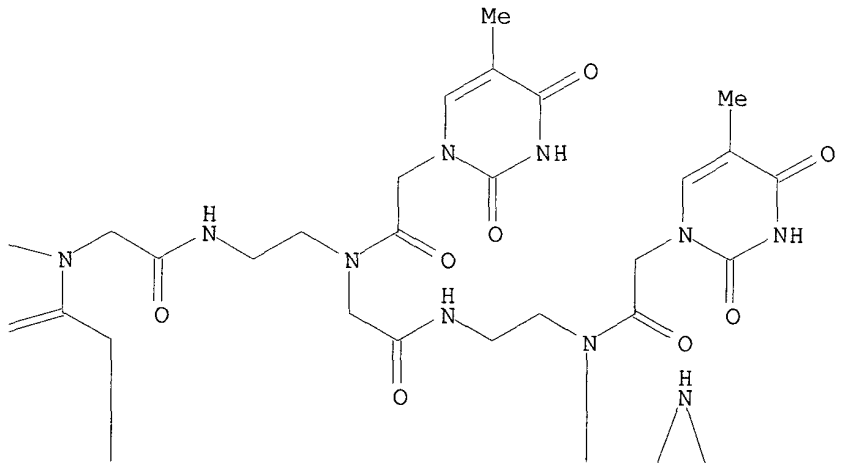
CRN 345201-87-8
CMF C80 H105 N27 O26

Absolute stereochemistry.

PAGE 1-A

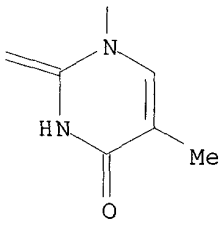


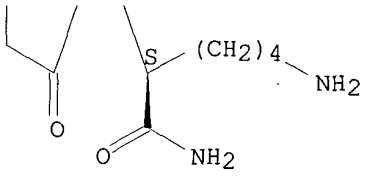
PAGE 1-B



PAGE 2-A

PAGE 2-B





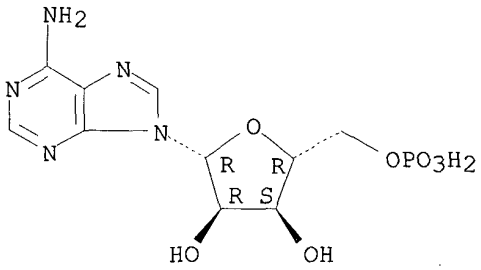
CM 2

CRN 24937-83-5
CMF (C10 H14 N5 O7 P)x
CCI PMS

CM 3

CRN 61-19-8
CMF C10 H14 N5 O7 P
CDES 5:B-D-RIBO

Absolute stereochemistry.



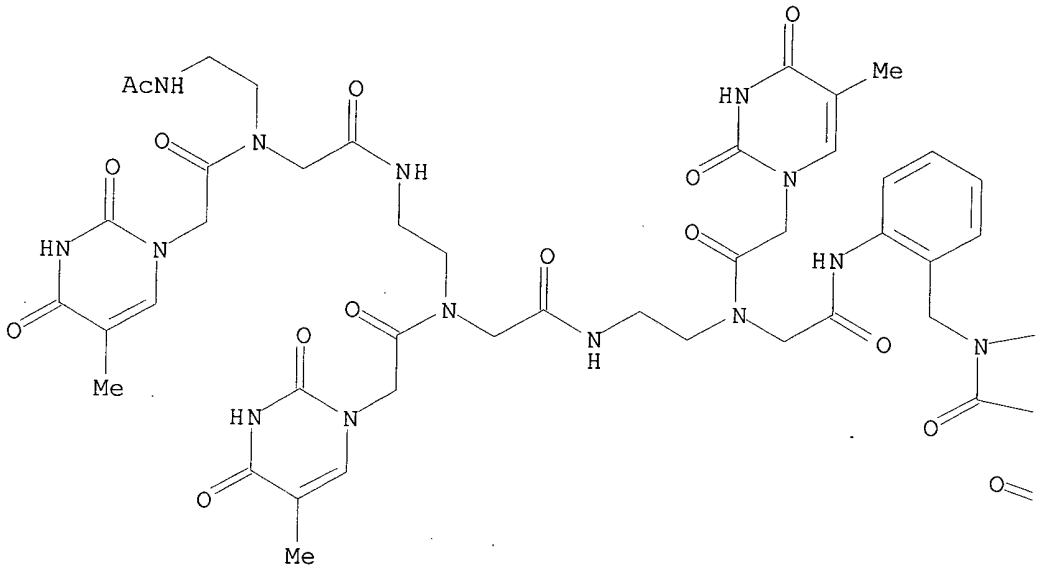
RN 345201-94-7 HCAPLUS
CN Peptide nucleic acid,
(acetyl-T-T-T-[N-[(2-aminophenyl)methyl]]C-T-T)-Lys-
NH2, complex with 5'-adenylic acid homopolymer (1:1) (9CI) (CA INDEX
NAME)

CM 1

CRN 345201-88-9
CMF C78 H102 N28 O25

Absolute stereochemistry.

PAGE 1-A



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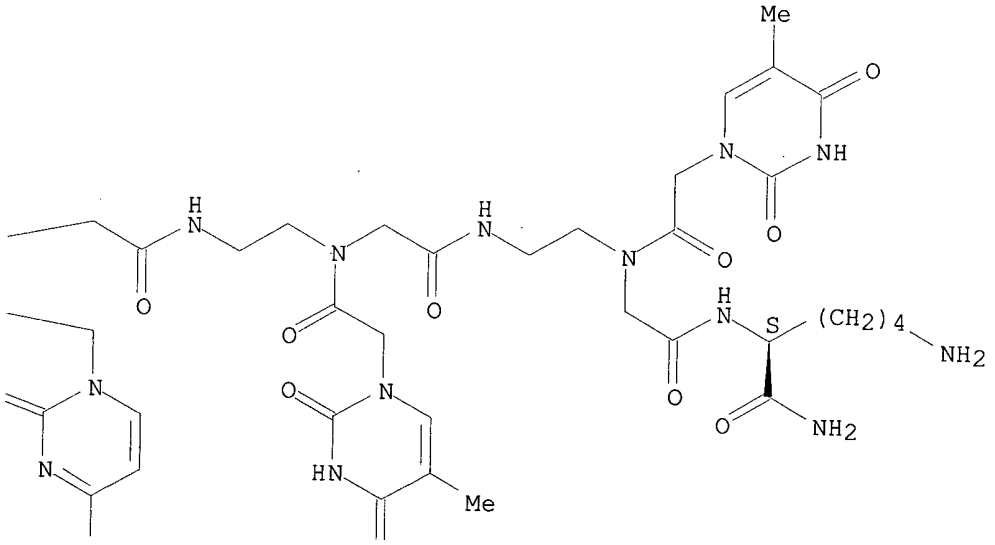


NH2 O

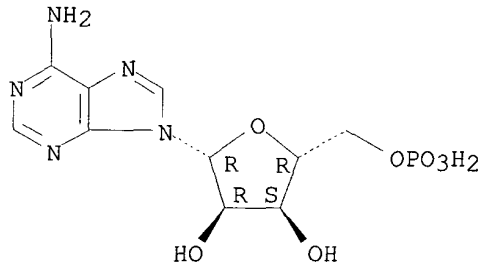
CM 2

CRN 24937-83-5
CMF (C10 H14 N5 O7 P)x
CCI PMS

CM 3

CRN 61-19-8
CMF C10 H14 N5 O7 P
CDES 5:B-D-RIBO

Absolute stereochemistry.



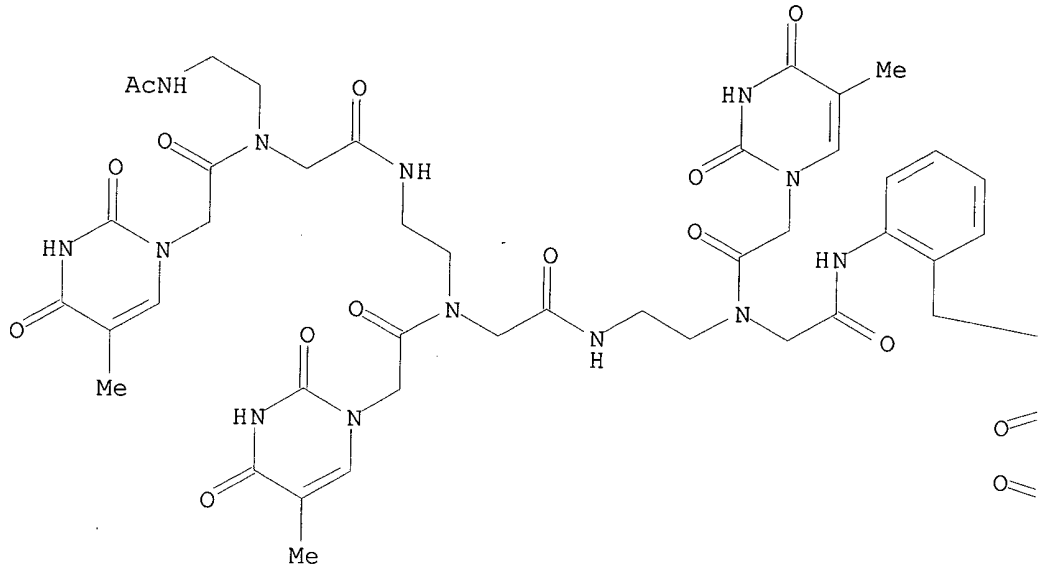
RN 345201-96-9 HCAPLUS
CN Peptide nucleic acid,
(acetyl-T-T-T-[N-[(2-aminophenyl)methyl]]T-T-T)-Lys-
NH2, complex with 2'-deoxy-5'-adenylic acid homopolymer (1:1) (9CI) (CA
INDEX NAME)

CM 1

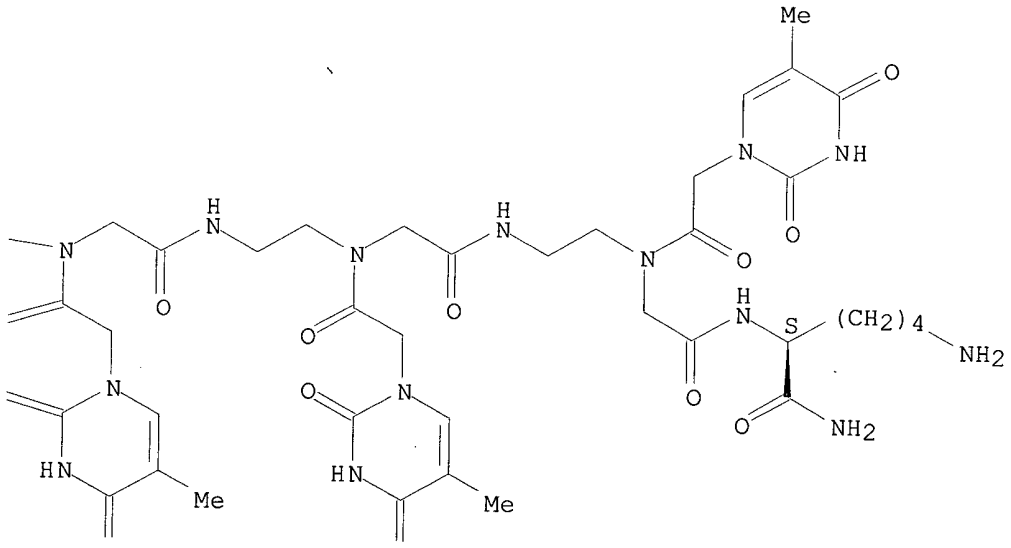
CRN 345201-84-5
CMF C79 H103 N27 O26

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



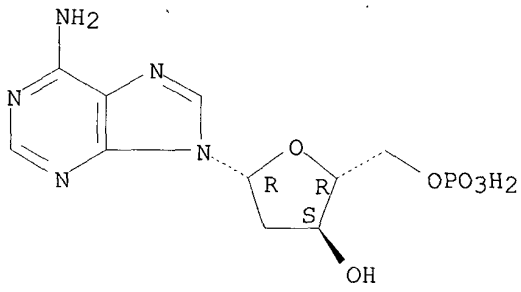
CM 2

CRN 25191-20-2
CMF (C10 H14 N5 O6 P)x
CCI PMS

CM 3

CRN 653-63-4
CMF C10 H14 N5 O6 P

Absolute stereochemistry. Rotation (+).



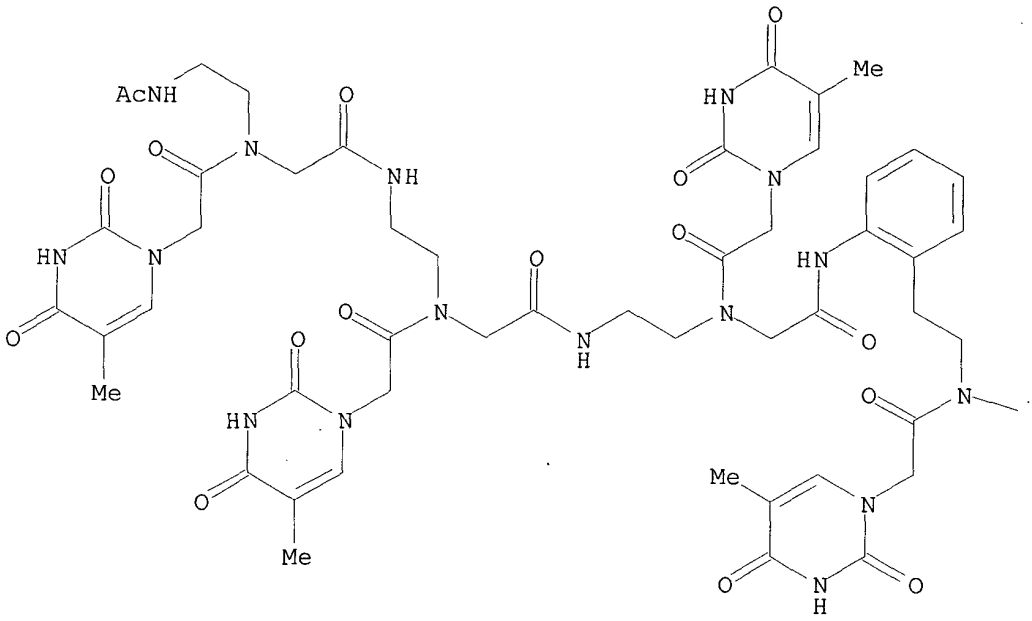
RN 345201-97-0 HCAPLUS
CN Peptide nucleic acid,
(acetyl-T-T-T-[N-[2-(2-aminophenyl)ethyl]]T-T-T)-Lys-
NH2, complex with 2'-deoxy-5'-adenylic acid homopolymer (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 345201-85-6
CMF C80 H105 N27 O26

Absolute stereochemistry.

PAGE 1-A



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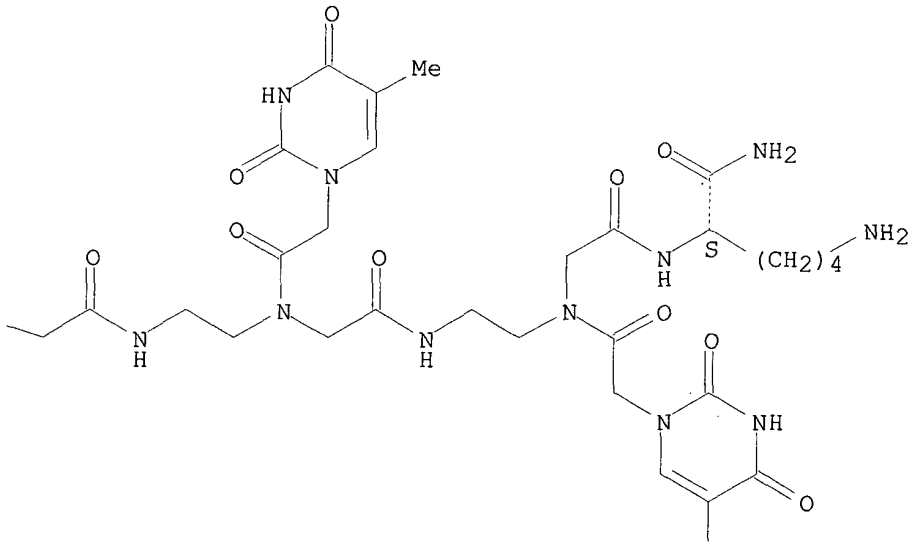


Me

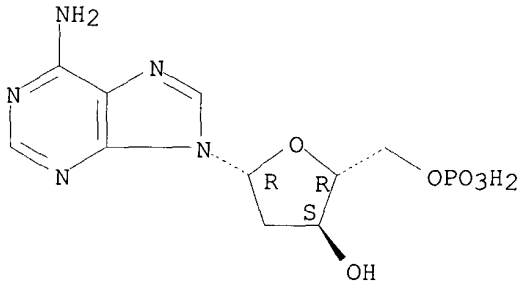
CM 2

CRN 25191-20-2
CMF (C10 H14 N5 O6 P)x
CCI PMS

CM 3

CRN 653-63-4
CMF C10 H14 N5 O6 P

Absolute stereochemistry. Rotation (+).



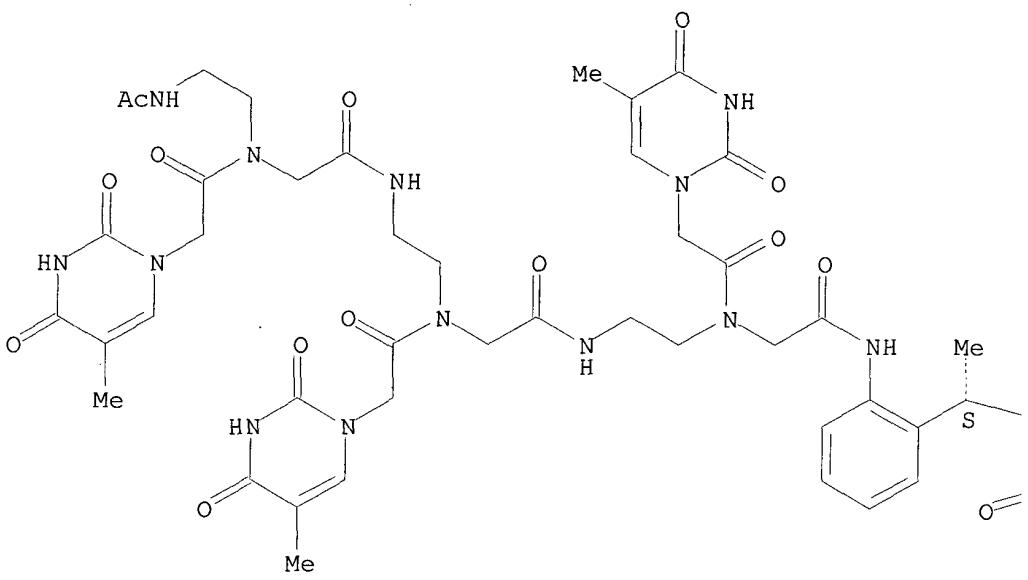
RN 345201-98-1 HCAPLUS
CN Peptide nucleic acid, (acetyl-T-T-T-[N-[(1S)-1-(2-aminophenyl)ethyl]]T-T-T)-Lys-NH2, complex with 2'-deoxy-5'-adenylic acid homopolymer (1:1) (9CI)
(CA INDEX NAME)

CM 1

CRN 345201-86-7
CMF C80 H105 N27 O26

Absolute stereochemistry.

PAGE 1-A



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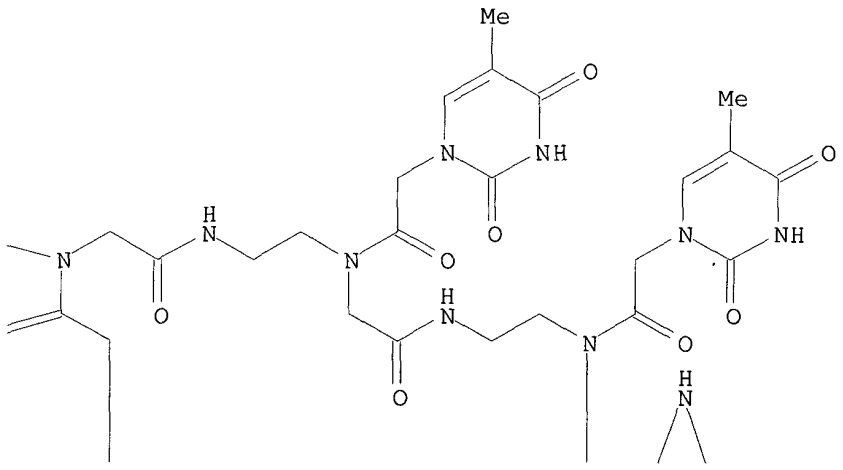

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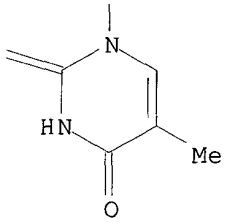
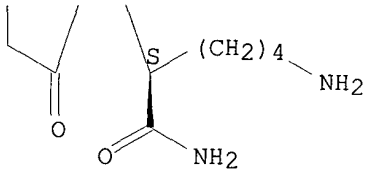
PAGE 2-B





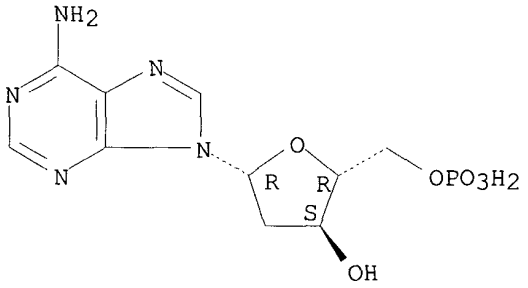
CM 2

CRN 25191-20-2
CMF (C10 H14 N5 O6 P)x
CCI PMS

CM 3

CRN 653-63-4
CMF C10 H14 N5 O6 P

Absolute stereochemistry. Rotation (+).



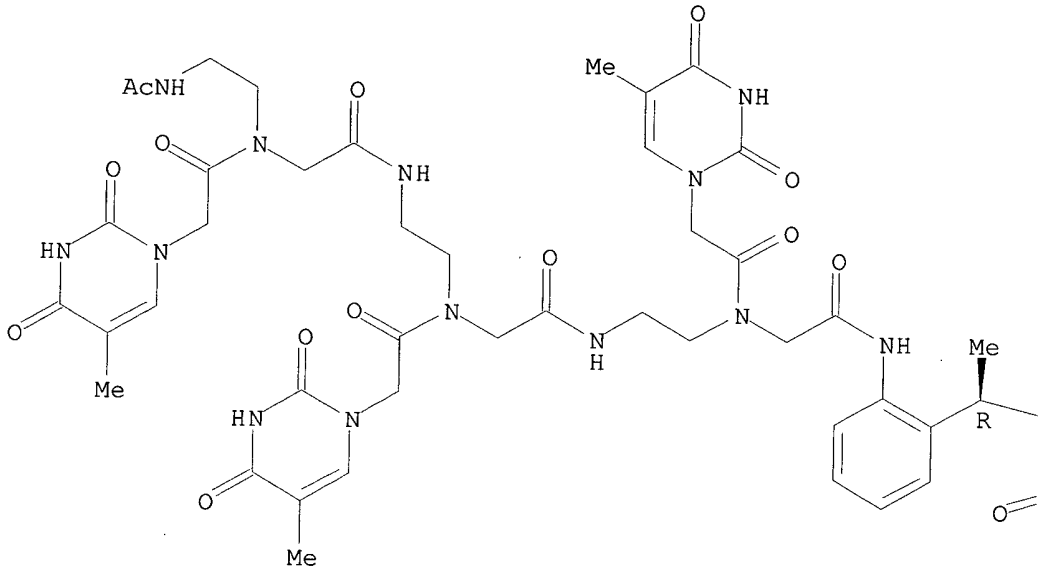
RN 345201-99-2 HCAPLUS
CN Peptide nucleic acid, (acetyl-T-T-T-[N-[(1R)-1-(2-aminophenyl)ethyl]]T-T-T)-Lys-NH2, complex with 2'-deoxy-5'-adenylic acid homopolymer (1:1) (9CI)
(CA INDEX NAME)

CM 1

CRN 345201-87-8
CMF C80 H105 N27 O26

Absolute stereochemistry.

PAGE 1-A



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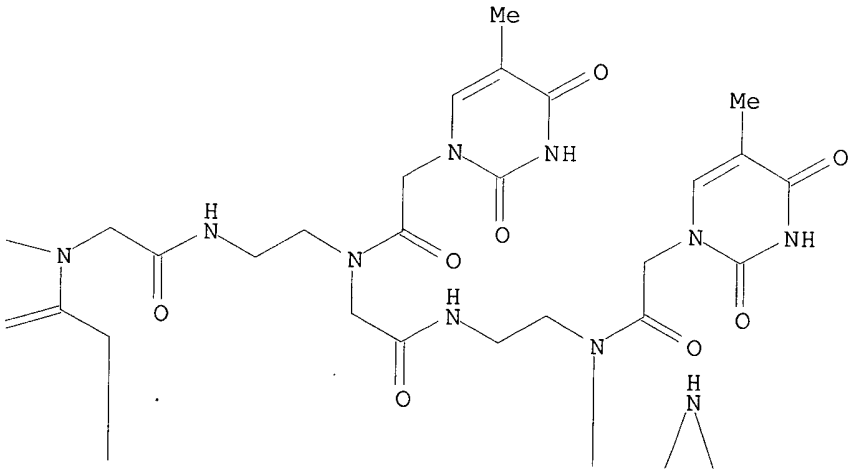

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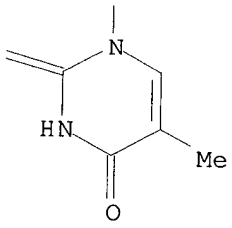
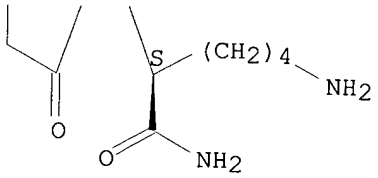
PAGE 2-B





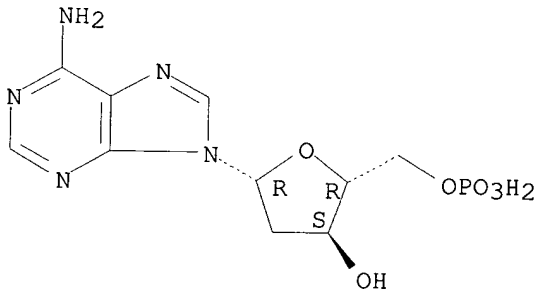
CM 2

CRN 25191-20-2
CMF (C10 H14 N5 O6 P)x
CCI PMS

CM 3

CRN 653-63-4
CMF C10 H14 N5 O6 P

Absolute stereochemistry. Rotation (+).



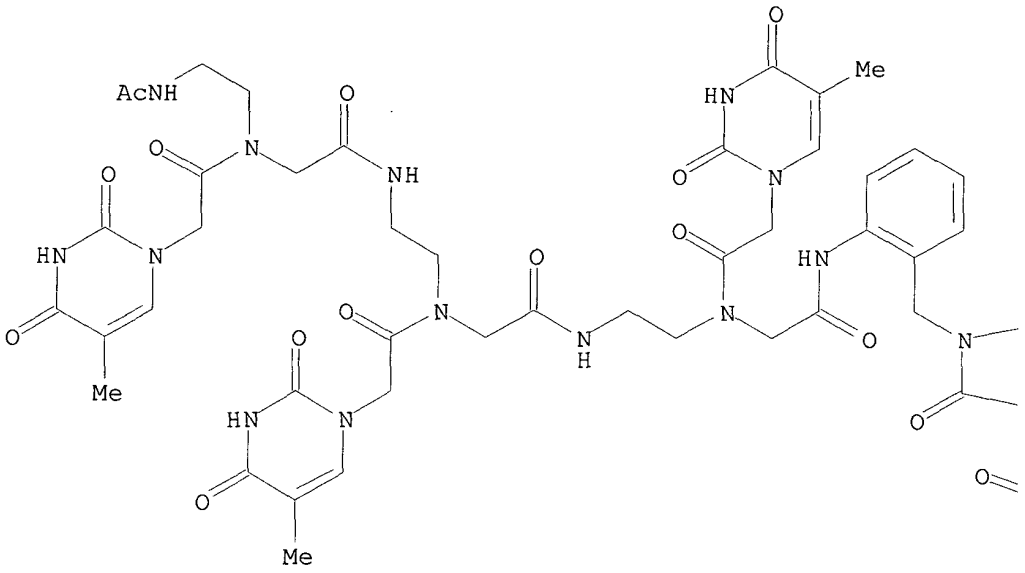
RN 345202-00-8 HCAPLUS
CN Peptide nucleic acid, (acetyl-T-T-T-[N-[(2-aminophenyl)methyl]]C-T-T)-Lys-NH2, complex with 2'-deoxy-5'-adenylic acid homopolymer (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 345201-88-9
CMF C78 H102 N28 O25

Absolute stereochemistry.

PAGE 1-A



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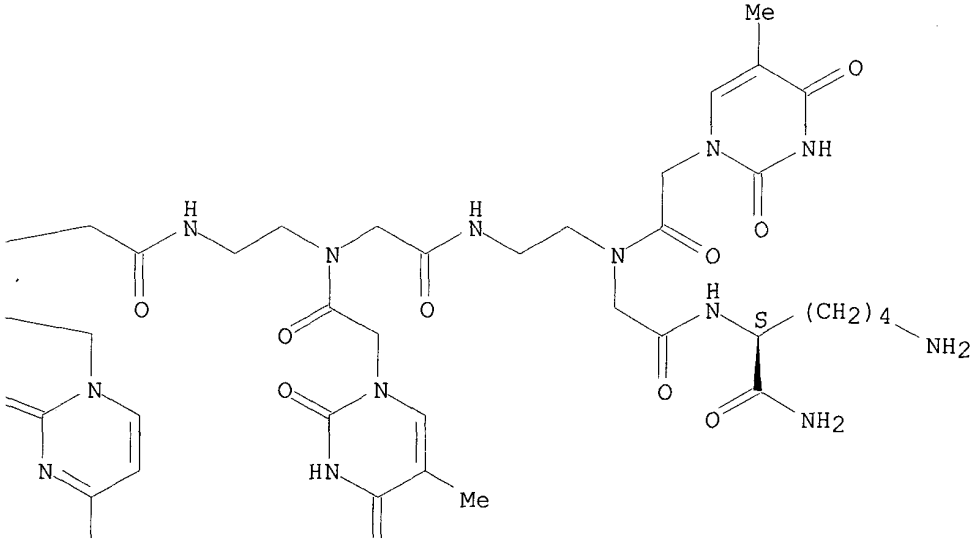


NH2 O

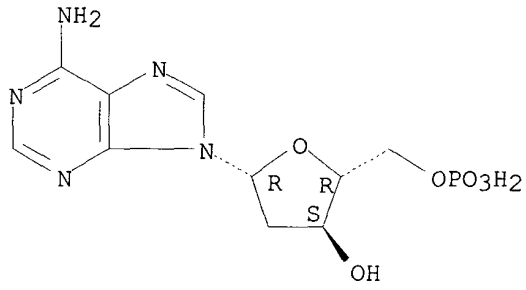
CM 2

CRN 25191-20-2
CMF (C10 H14 N5 O6 P)x
CCI PMS

CM 3

CRN 653-63-4
CMF C10 H14 N5 O6 P

Absolute stereochemistry. Rotation (+).



RE.CNT 45
RE
(1) Abdel-Magid, A; J Org Chem 1996, V61, P3849 HCAPLUS
(2) Abdel-Magid, A; Tetrahedron Lett 1990, V31, P5595 HCAPLUS
(4) Adams, H; Chem Commun 1996, P2531 HCAPLUS
(5) Aldrian-Herrada, G; J Peptide Sci 1998, V4, P266 HCAPLUS
(6) Bickel, U; Proc Natl Acad Sci U S A 1993, V90, P2618 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

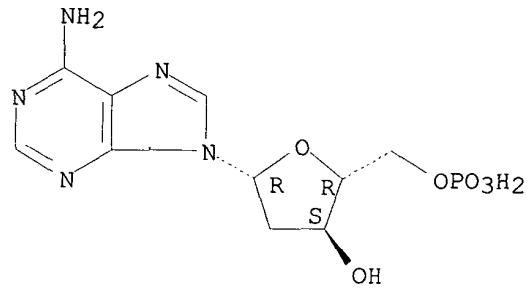
=> d bib abs hitstr 2

L54 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2001 ACS
AN 1997:458955 HCAPLUS
DN 127:205807
TI Compounds based on meso-tri-(4-pyridyl)-p-acrylamido-phenylporphyrin able to interact with DNA
AU Li, Handong; Czuchajowski, Leszek; Trumble, William R.
CS Department of Chemistry, University of Idaho, Moscow, ID, 83844-2434, USA
SO J. Heterocycl. Chem. (1997), 34(3), 999-1003
CODEN: JHTCAD; ISSN: 0022-152X
PB HeteroCorporation
DT Journal
LA English
AB A new type of porphyrinyl-nucleoside was synthesized by the Heck reaction of meso-tri(4-pyridyl)-p-acrylamidophenylporphyrin with (+)-5-iodo-2'-deoxyuridine. The porphyrin used in this reaction was also applied in obtaining a water sol. porphyrin polymer and a copolymer with acrylamide. The porphyrinyl-nucleoside and the polymer and copolymer were investigated for their interaction with DNA, oligodeoxyribonucleotides and oligodeoxyribonucleotide duplexes. The extend of the red-shift of the Soret band of porphyrins and the slowing of the mobility of DNA during electrophoresis of the interacting systems suggested that intercalation of cationic porphyrin units into ds DNA cannot be solely responsible for the obsd. phenomena.
IT **193680-30-7P 193680-31-8P 193680-32-9P**
194303-85-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of meso-tripyridylacrylamidophenylporphyrin able to interact with DNA)
RN 193680-30-7 HCAPLUS
CN 5'-Adenylic acid, 2'-deoxy-, compd. with 4,4',4''-[20-[4-[(1-oxo-2-propenyl)amino]phenyl]-21H,23H-porphine-5,10,15-triyl]tris[1-methylpyridinium] triiodide homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 653-63-4
CMF C10 H14 N5 O6 P

Absolute stereochemistry. Rotation (+).



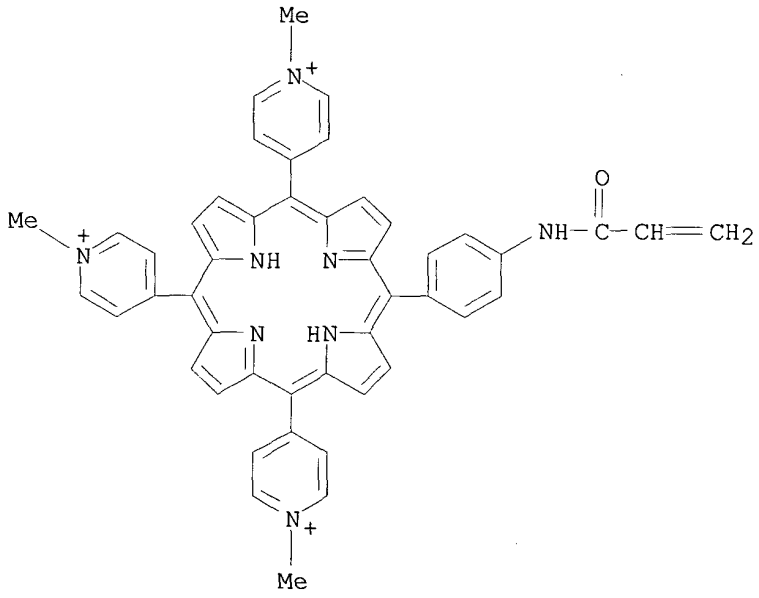
CM 2

CRN 193680-29-4
CMF (C47 H39 N8 O . 3 I)x
CCI PMS

CM 3

CRN 193680-21-6
CMF C47 H39 N8 O . 3 I

PAGE 1-A



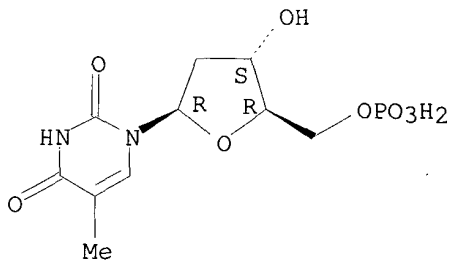
●3 I^-

RN 193680-31-8 HCAPLUS
CN 5'-Thymidylic acid, compd. with 4,4',4''-[20-[4-[(1-oxo-2-propenyl)amino]phenyl]-21H,23H-porphine-5,10,15-triyl]tris[1-methylpyridinium] triiodide homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 365-07-1
CMF C10 H15 N2 O8 P
CDES 5:B-D-ERYTHRO

Absolute stereochemistry.



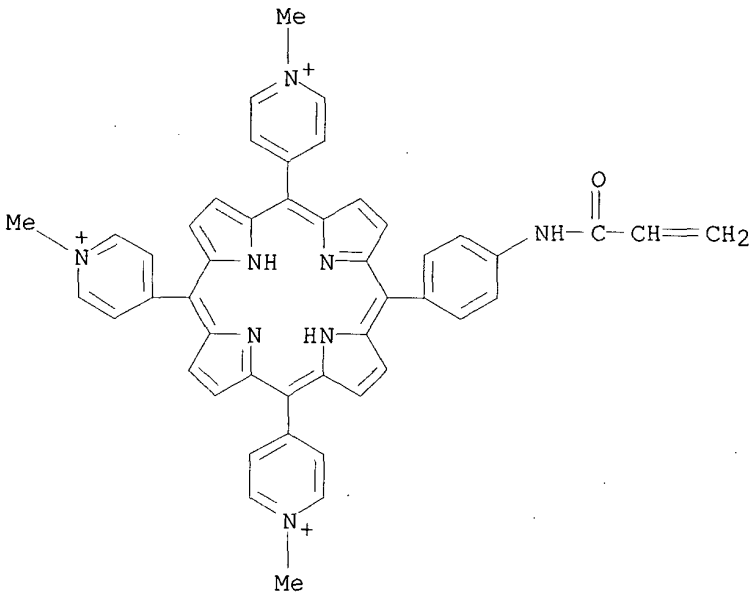
CM 2

CRN 193680-29-4
CMF (C47 H39 N8 O . 3 I)x
CCI PMS

CM 3

CRN 193680-21-6
CMF C47 H39 N8 O . 3 I

PAGE 1-A



PAGE 2-A

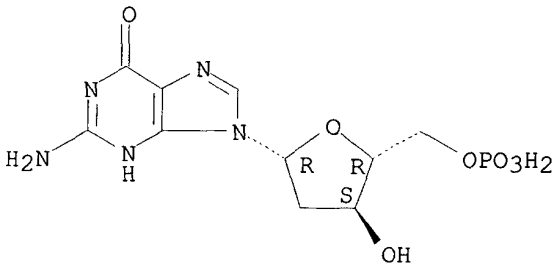
●3 I^-

RN 193680-32-9 HCAPLUS
CN 5'-Guanylic acid, 2'-deoxy-, compd. with 4,4',4''-[20-[4-[(1-oxo-2-propenyl)amino]phenyl]-21H,23H-porphine-5,10,15-triyl]tris[1-methylpyridinium] triiodide homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 902-04-5
CMF C10 H14 N5 O7 P
CDES 5:B-D-ERYTHRO

Absolute stereochemistry.



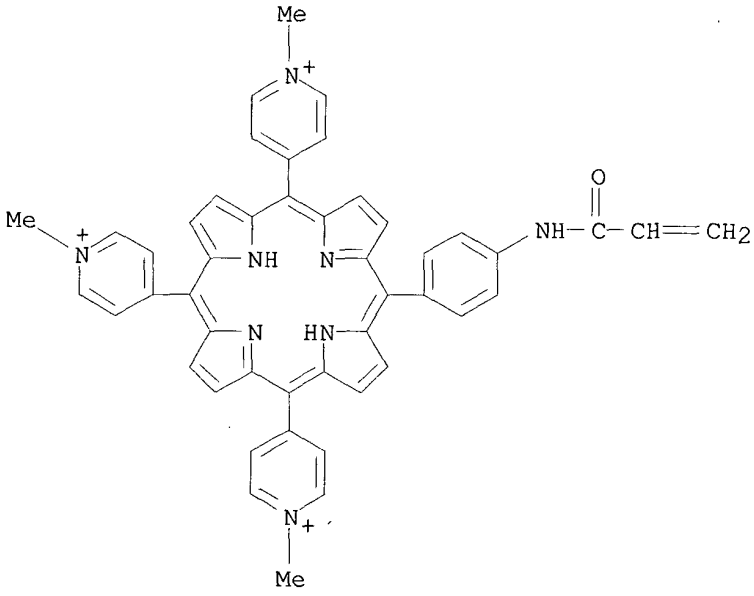
CM 2

CRN 193680-29-4
CMF (C47 H39 N8 O . 3 I)x
CCI PMS

CM 3

CRN 193680-21-6
CMF C47 H39 N8 O . 3 I

PAGE 1-A



PAGE 2-A

●3 I^-

RN 194303-85-0 HCAPLUS
CN DNA, d(C-C-C-C-C-C-C-C-C-C-C-C-C-C-C-C-C-C-C-C), double-stranded complementary, compd. with 4,4',4''-[20-[4-[(1-oxo-2-propenyl)amino]phenyl]-21H,23H-porphine-5,10,15-triyl]tris[1-methylpyridinium] triiodide homopolymer (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 194104-53-5
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

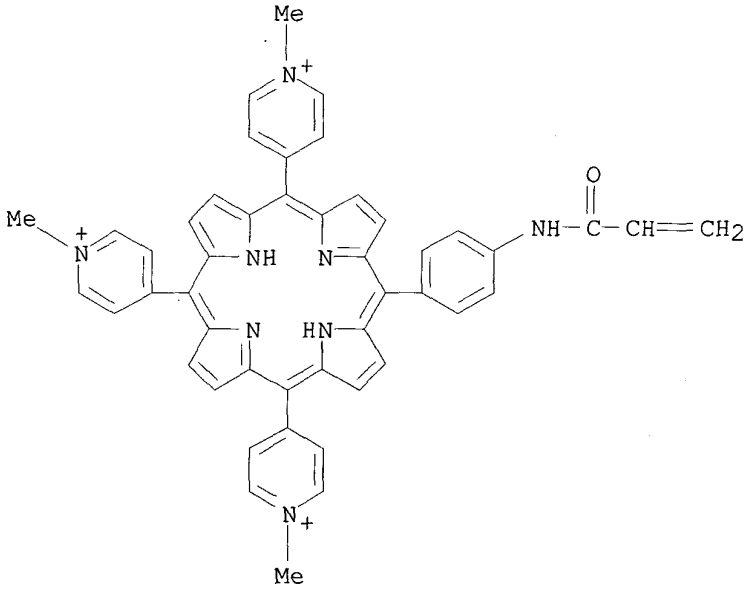
CM 2

CRN 193680-29-4
CMF (C47 H39 N8 O . 3 I)x
CCI PMS

CM 3

CRN 193680-21-6
CMF C47 H39 N8 O . 3 I

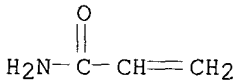
PAGE 1-A



●3 I-

CM 3

CRN 79-06-1
CMF C3 H5 N O



L66 ANSWER 36 OF 43 HCAPLUS COPYRIGHT 2001 ACS
AN 1994:261341 HCAPLUS
DN 120:261341
TI Conjugates of biologically stable polyfunctional molecules and **polynucleotides** for treating systemic lupus erythematosus (SLE)
IN Conrad, Michael J.; Coutts, Stephen
PA La Jolla Pharmaceutical Co., USA
SO U.S., 21 pp. Cont.-in-part of U.S. 5,162,515.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 8

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5276013	A	19940104	US 1992-914869	19920715
	US 5162515	A	19921110	US 1990-494118	19900313
	CA 2034197	AA	19910717	CA 1991-2034197	19910115
	WO 9110426	A1	19910725	WO 1991-US293	19910115
	W: FI, JP, NO				
	JP 05505520	T2	19930819	JP 1991-503584	19910115
	AT 139448	E	19960715	AT 1991-300262	19910115
	ES 2090233	T3	19961016	ES 1991-300262	19910115
	AU 9169418	A1	19910718	AU 1991-69418	19910116
	AU 640730	B2	19930902		
	NO 9202781	A	19920714	NO 1992-2781	19920714
	FI 9203241	A	19920715	FI 1992-3241	19920715
	US 5552391	A	19960903	US 1993-152506	19931115
	US 5606047	A	19970225	US 1995-453254	19950530
	US 5633395	A	19970527	US 1995-453452	19950530
PRAI	US 1990-466138		19900116		
	US 1990-494118		19900313		
	WO 1991-US293		19910115		
	US 1991-652648		19910208		
	US 1992-914869		19920715		
	US 1993-118055		19930908		
	US 1993-152506		19931115		

AB Chem. defined conjugates are disclosed which consist of biol. stable valency platform mols., e.g. copolymers of D-glutamic acid and D-lysine or
PEG, and **polynucleotide** duplexes of .gtoreq.20 base pairs that have significant binding activity for human lupus anti-dsDNA autoantibodies. The duplexes are preferably homogeneous in length structure and are bound to the valency platform mol. via reaction between a functional group located at or proximate a terminus of each duplex and

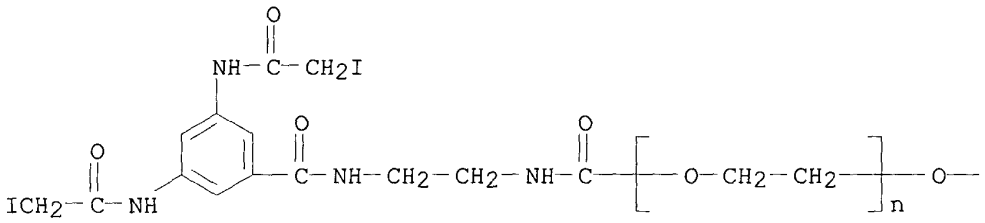
functional groups on the valency platform mol. The conjugates are tolerogens for human SLE. Thus a conjugate of D-glutamic acid-D-lysine copolymer with (AC)30:(TG)30 was prepd. and tested as a tolerogen in a murine model for human SLE.

IT **154231-81-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and reaction of, in duplex **polynucleotide**-polymeric valency platform mol. **conjugate** prepn.)

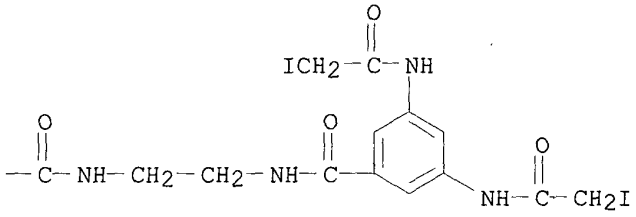
RN 154231-81-9 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-[[[2-[[3,5-bis[(iodoacetyl)amino]benzoyl]amino]ethyl]amino]carbonyl]-.omega.-[[[[2-[[3,5-bis[(iodoacetyl)amino]benzoyl]amino]ethyl]amino]carbonyl]oxy]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



I think this is a K-linker where acyl groups leave during ORN.

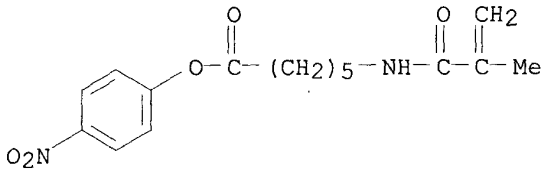
L66 ANSWER 37 OF 43 HCAPLUS COPYRIGHT 2001 ACS
AN 1994:237613 HCAPLUS
DN 120:237613
TI **Oligonucleotides** modified with conjugate groups
IN Cook, Alan F.
PA Pharmagenics, Inc., USA
SO PCT Int. Appl., 39 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9401448	A1	19940120	WO 1993-US6368	19930701

W: CA, JP
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
US 6172208 B1 20010109 US 1992-908376 19920706
PRAI US 1992-908376 A 19920706
AB **Oligonucleotide** conjugates with amino acids; dipeptide mimics; sugars; sugar phosphates; neurotransmitters; poly-hydroxypropylmethacrylamide; dextrans; polymaleic anhydride; cyclodextrins; starches; and polyethyleneimine are prepd. for use as **diagnostics** or therapeutics. A 15-base **oligonucleotide** was conjugated with AminoLink II before deprotection. After deprotection, the 5'-amino **oligonucleotide** was conjugated with the N-hydroxysuccinimide ester of Fmoc-methionine and the Fmoc group removed by std. chem. to give the methionine conjugate of the **oligonucleotide**. Conjugation of the derivatized **oligonucleotide** with sugars, sugar phosphates, antibiotics, neurotransmitters, polysaccharides, and polyacrylates is demonstrated.
IT **64129-75-5DP, conjugates** with **oligonucleotides**
RL: PREP (Preparation)
(prepn. of, AminoLink II in)
RN 64129-75-5 HCAPLUS
CN Hexanoic acid, 6-[(2-methyl-1-oxo-2-propenyl)amino]-, 4-nitrophenyl ester, polymer with N-(2-hydroxypropyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

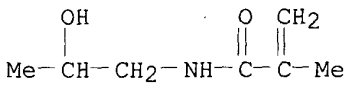
CRN 57950-59-1
CMF C16 H20 N2 O5



Any / moiety is leaving group that goes when Diego is added - so this ≠ ant.

CM 2

CRN 21442-01-3
CMF C7 H13 N O2



L66 ANSWER 38 OF 43 HCAPLUS COPYRIGHT 2001 ACS
AN 1993:96449 HCAPLUS

Bright 3/24/03
#1

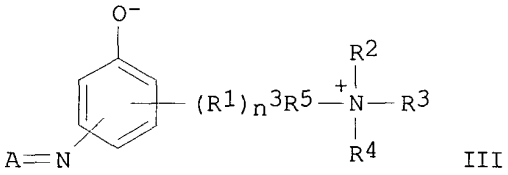
SCHNIZER 09/627,787

=> d bib abs hitstr 1

L21 ANSWER 1 OF 6 HCAPLUS COPYRIGHT 2001 ACS
AN 1998:25602 HCAPLUS
DN 128:147448
TI Silver halide photographic material containing cross-over-cutting dye
IN Kimura, Yoko; Yamada, Taketoshi; Miura, Norio
PA Konica Co., Japan
SO Jpn. Kokai Tokkyo Koho, 50 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 10003140	A2	19980106	JP 1996-154252	19960614

GI



III

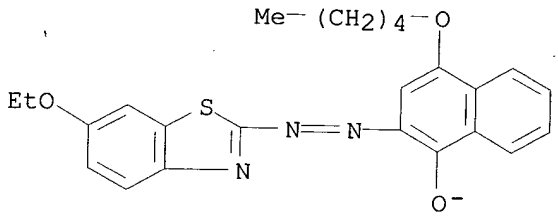
AB Claimed photog. material is characterized by (1) that Ag halide emulsion contains tabular grains with (111) major plane and aspect ratio of 2-20 in the amt. of .gtoreq.50% of grain-projected areas, (2) that the tabular grains have the AgI content of 0-0.1 mol%, (3) that they are crystd. in presence of a Ag halide solvent and (4) that a compd. selected from non-diffusible dye Xm1(Dye)(Ball)n1 (I; (dye) is a dye moiety having spectral absorption max. at 520-750 nm; Ball is a non-diffusible group; X is carboxylate or sulfonate; n1 = 1-3; m1 = 1-6), a polymer consisting of monomer (Dye)-Q (II; (Dye) designates the same as above; Q = ethylenic unsatd. group) and an azomethyne dye III (A = atom group needed for forming azomethyne dye with the absorption max. at 520-750 nm; R1 = substituent; n3 = 0-4; R2-5 = alkyl, aryl, polymer residue) is incorporated in one of the component layer. It has good processing consistency, and provides a Ag image with neutral color tone, consequently, is applied to **medical** x-ray film.

IT **194942-57-9**
RL: DEV (Device component use); USES (Uses)
(dye; photog. material contg. cross-over-cutting dye to provide process stability and silver image with neutral color tone)

RN 194942-57-9 HCAPLUS
CN Benzenaminium, N,N,N-trimethyl-4-[(2-methyl-1-oxo-2-propenyl)amino]-, polymer with butyl 2-propenoate, salt with 2-[(6-ethoxy-2-benzothiazolyl)azo]-4-(pentyloxy)-1-naphthalenol (9CI) (CA INDEX NAME)

CM 1

CRN 194942-56-8
CMF C24 H24 N3 O3 S

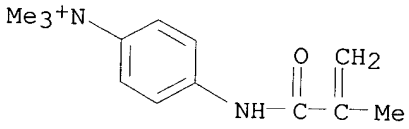


CM 2

CRN 194942-51-3
CMF (C13 H19 N2 O . C7 H12 O2)x
CCI PMS

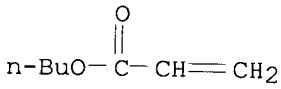
CM 3

CRN 46729-11-7
CMF C13 H19 N2 O



CM 4

CRN 141-32-2
CMF C7 H12 O2



=> d bib abs hitstr 2

L21 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2001 ACS
AN 1997:509579 HCAPLUS
DN 127:227398
TI Silver halide photographic material containing tabular grains and dye toner for automatic processing
IN Yamada, Taketoshi; Miura, Norio
PA Konica Co., Japan
SO Jpn. Kokai Tokkyo Koho, 43 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09197612	A2	19970731	JP 1996-8294	19960122

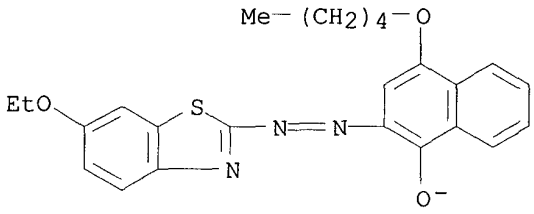
AB Claimed photog. material is characterized by (1) that the av. AgI content is .ltoreq.1 mol.%, (2) that .gtoreq.50% of grain-projected area is shared by tabular grains with the aspect ratio of 2 to 20, and (3) that a component layer contains a non-diffusible dye (Ball)n-(Dye)-Xm, (I; Dye = dye with spectral absorption peak at 520 to 750 nm; Ball = non-diffusible group; X = COW1, SO2W2; W1, W2 = H, alkali metal, alk. earth metal; m = 1-6; n = 1-3). Also claimed is the rapid processing method with the total processing time of 1-30 s (dry to-dry basis) and the low replenishment processing with the replenishment rate of 30-200 mL/m2. The dye remains in the image layer and provides neutral black silver image suitable for **medical** diagnosis, consequently, the material is suitably used as **medical** x-ray film. It also has a good storage stability. Suitable dyes used in the examples of **medical** x-ray films are 1-[1-(2,5-di-tert-amylphenoxy)butyroylamido]-3-sulfo-4-amino-9,10-anthraquinone, 1-(4-dodecyloxyphenylsulfoamido)-3-carboxy-4-amino-9,10-anthraquinone, pentamethylene-bis(1-p-sufophenyl-3-palmityl-5-pyrazolon-4-yl), a Ni-phthalocyanine, etc.

IT **194942-57-9**
RL: DEV (Device component use); USES (Uses)
(dye; photog. material contg. tabular grains and dye toner to provide neutral black image suitable for **medical** diagnosis)

RN 194942-57-9 HCAPLUS
CN Benzenaminium, N,N,N-trimethyl-4-[(2-methyl-1-oxo-2-propenyl)amino]-, polymer with butyl 2-propenoate, salt with 2-[(6-ethoxy-2-benzothiazolyl)azo]-4-(pentyloxy)-1-naphthalenol (9CI) (CA INDEX NAME)

CM 1

CRN 194942-56-8
CMF C24 H24 N3 O3 S

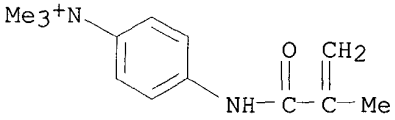


CM 2

CRN 194942-51-3
CMF (C13 H19 N2 O . C7 H12 O2)x
CCI PMS

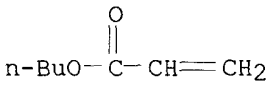
CM 3

CRN 46729-11-7
CMF C13 H19 N2 O



CM 4

CRN 141-32-2
CMF C7 H12 O2

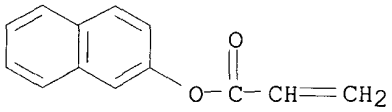


=> d bib abs hitstr 3

L21 ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2001 ACS
AN 1996:430002 HCAPLUS
DN 125:177158
TI Controlled activity polymers. IX. Copolymers of acrylic acid and isomeric N-alkylacrylamide monomers with pendent .beta.-naphthol ester moieties: Hydrolytic release studies
AU Boudreaux, C. J.; Bunyard, W. C.; McCormick, C. L.
CS Department of Polymer Science, The University of Southern Mississippi, Hattiesburg, MS, USA
SO J. Controlled Release (1996), 40(3), 235-243
CODEN: JCREEC; ISSN: 0168-3659
DT Journal
LA English
AB The hydrolytic release of the allelopathic compd., .beta.-naphthol, from copolymers of acrylic acid and N-substituted acrylamide monomers .beta.-naphthyl acrylate, 2-acrylamido(.beta.-naphthyl)isovalerate, 5-acrylamido(.beta.-naphthyl)valerate, 3-acrylamido-3-methyl(.beta.-naphthyl)butanoate and 6-acrylamido(.beta.-naphthyl)caproate was studied. Reversed-phase liq. chromatog. with UV spectrophotometric detection was utilized to follow kinetics of naphthol release from series of well-characterized copolymers in aq. media at three pH conditions. Release profiles of the totally sol. copolymers with 4 to 12 mol % naphthol ester monomers were compared to those of the constituent monomers or model compds. at pH values of 2, 6 and 10. Release rates and the extent of release depended upon the nature of the monomer, the spacing of the naphthol ester moiety from the polymer backbone and pH. The extent of hydrophilicity of the polymer backbone was the major factor as dictated by pH (degree of ionization of the acrylic acid mers) and by the copolymer microstructure. The substituted hydrophobic copolymers exhibited the slowest release rates. At high pH values, a max. in naphthol ester hydrolysis was obsd., apparently due to a thermodn. limit on charge along the polyelectrolyte. Neighboring group assistance was obsd. at pH 6 and 2 values for the .beta.-naphthol acrylate copolymers. The initial hydrolysis rates for all of the other copolymers in water and for the monomers in dioxane/water mixts. followed pseudo-first-order kinetics. The limited extent of hydrolysis, dependent upon pH and compn., was attributed to long-range associative effects in aq. media.
IT **153457-48-8P 153457-49-9P 153457-50-2P**
169893-93-0P 169893-95-2P
RL: PNU (Preparation, unclassified); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(copolymers of acrylic acid and isomeric alkylacrylamide monomers with pendent .beta.-naphthol ester moieties for controlled **drug** release)
RN 153457-48-8 HCAPLUS
CN 2-Propenoic acid, polymer with 2-naphthalenyl 2-propenoate (9CI) (CA INDEX NAME)

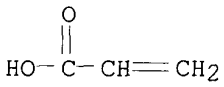
CM 1

CRN 52684-34-1
CMF C13 H10 O2



CM 2

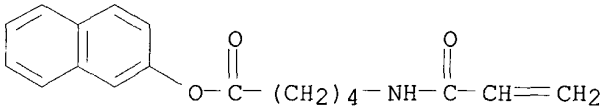
CRN 79-10-7
CMF C3 H4 O2



RN 153457-49-9 HCAPLUS
CN Pentanoic acid, 5-[(1-oxo-2-propenyl)amino]-, 2-naphthalenyl ester, polymer with 2-propenoic acid (9CI) (CA INDEX NAME)

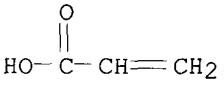
CM 1

CRN 153457-47-7
CMF C18 H19 N O3



CM 2

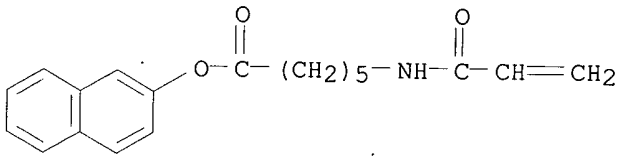
CRN 79-10-7
CMF C3 H4 O2



RN 153457-50-2 HCAPLUS
CN Hexanoic acid, 6-[(1-oxo-2-propenyl)amino]-, 2-naphthalenyl ester, polymer
with 2-propenoic acid (9CI) (CA INDEX NAME)

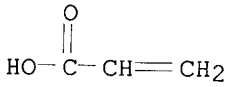
CM 1

CRN 153457-46-6
CMF C19 H21 N O3



CM 2

CRN 79-10-7
CMF C3 H4 O2

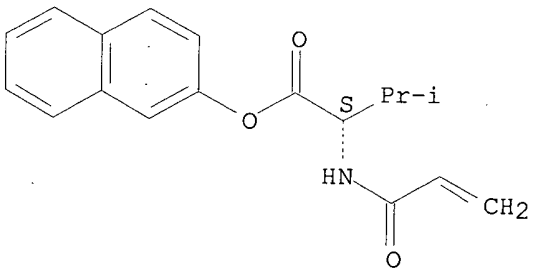


RN 169893-93-0 HCAPLUS
CN L-Valine, N-(1-oxo-2-propenyl)-, 2-naphthalenyl ester, polymer with 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

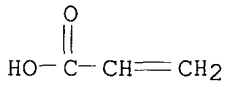
CRN 169893-92-9
CMF C18 H19 N O3
CDES 5:L

Absolute stereochemistry.



CM 2

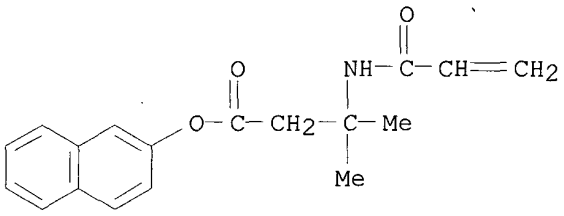
CRN 79-10-7
CMF C3 H4 O2



RN 169893-95-2 HCAPLUS
CN Butanoic acid, 3-methyl-3-[(1-oxo-2-propenyl)amino]-, 2-naphthalenyl ester, polymer with 2-propenoic acid (9CI) (CA INDEX NAME)

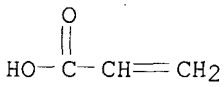
CM 1

CRN 169893-94-1
CMF C18 H19 N O3



CM 2

CRN 79-10-7
CMF C3 H4 O2



=> d bib abs hitstr 4

L21 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2001 ACS
AN 1994:676195 HCAPLUS
DN 121:276195
TI Biologically active initiators for radical polymerization
IN Heiliger, Ludger
PA Bayer A.-G., Germany
SO Eur. Pat. Appl., 16 pp.
CODEN: EPXXDW
DT Patent
LA German
FAN.CNT 1

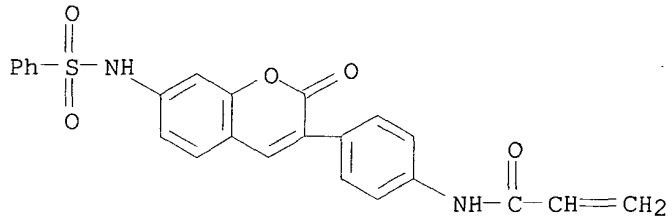
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 591809	A2	19940413	EP 1993-115566	19930927
	EP 591809	A3	19940803		
	R: BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE				
	DE 4322885	A1	19940414	DE 1993-4322885	19930709
	JP 06234806	A2	19940823	JP 1993-272939	19931006
	US 5534630	A	19960709	US 1994-320597	19941007
PRAI	DE 1992-4234074		19921009		
	DE 1993-4322885		19930709		
	US 1993-130880		19931004		

AB Biol. active initiators were prepd. with the general structure A-L-B[L-A]y, (where A = biol. active part; B = a radical-forming part; L = linker group; and y = 0 or 1, preferably 1). The biol. active part A may be, e.g., biotin, digitoxin, digoxin, digitoxigenin, digoxigenin, and **oligonucleotides** with 1-80 bases, esp. 20-35 bases. The compds. are useful in radical polymn. and for hybridization assays. Thus, an initiator was prepd. by reaction of the **oligonucleotide** ATCCAGTTGTGTCTTCAAC with 4,4'-azobis(4-cyanopentanoic acid hydroxysuccinimidyl ester). The initiator then was used in the prepn. of a polymer from Na p-styrylsulfonate and coumarin dye that had an av. mol. wt. of 500,000 and could be used directly in hybridization tests for the detection of **DNA** or RNA with a **nucleotide** sequence complimentary to the **oligonucleotide** in the initiator.

IT **151137-49-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and conjugation with avidin or streptavidin)
RN 151137-49-4 HCAPLUS
CN Benzenesulfonic acid, 4-ethenyl-, sodium salt, polymer with N-[4-[2-oxo-7-[(phenylsulfonyl)amino]-2H-1-benzopyran-3-yl]phenyl]-2-propenamide (9CI) (CA INDEX NAME)

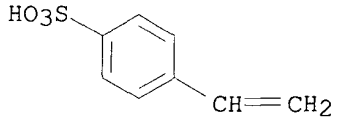
CM 1

CRN 151110-17-7
CMF C24 H18 N2 O5 S



CM 2

CRN 2695-37-6
CMF C8 H8 O3 S . Na



● Na

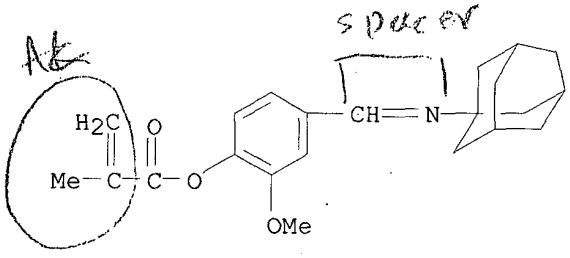
Looks like 1026 hw
1, 6, 11?, 13?, 14,? 22, 24, 25
12?
10 36 hw 23, 25, 26

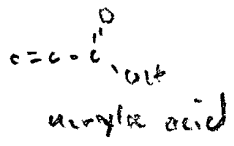
=> d bib abs hitstr 5

L21 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2001 ACS
AN 1986:539539 HCAPLUS
DN 105:139539
TI Synthesis and hydrolysis of polymers having anesthetic or amantadine residues in sidechains
AU Sugiyama, Kazuo
CS Fac. Eng., Kinki Univ., Kure, 737-01, Japan
SO J. Macromol. Sci., Chem. (1986), A23(10), 1155-64
CODEN: JMCHBD; ISSN: 0022-233X
DT Journal
LA English
AB Prodrugs of benzocaine-HCl [23239-88-5], procaine-HCl [51-05-8] and amantadine [768-94-5] were prepd. by methacryloylation of the **drugs** followed by polym. with Me methacrylate or with styrene. Alternatively the prodrugs were prepd. by introducing vanillin [121-33-5]
as a spacer group followed by methacryloylation and polymn. Both the polymeric and monomeric derivs. of the monomeric **drugs** were hydrolyzed in vitro at 37.degree. in pH 1 and 7.0 solns. simulating the pH
values of gastric juice and saliva, resp. The hydrolysis rate of the **drugs** bound to polymers without the spacer group was slow and unaffected by the pH of the medium. The hydrolysis rate with spacer groups present was very fast. The polymeric **drugs** obtained by polymn. with the methacrylate were hydrolyzed more easily than those prepd. with styrene. Hydrolysis of the compds. with spacer groups occurred more easily than the compds. without them. Thus, vanillin as a spacer group plays on important role in hydrolysis.
IT **104378-11-2P 104378-12-3P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and hydrolysis of, as prodrug)
RN 104378-11-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 4-[(tricyclo[3.3.1.13,7]dec-1-ylimino)methyl]-2-methoxyphenyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

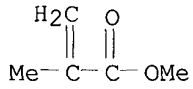
CRN 99031-57-9
CMF C22 H27 N O3





CM 2

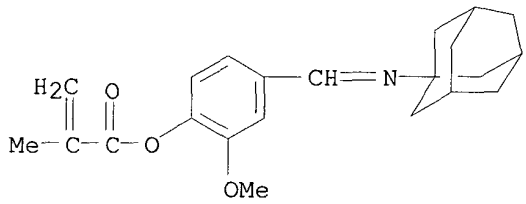
CRN 80-62-6
CMF C5 H8 O2



RN 104378-12-3 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 4-[(tricyclo[3.3.1.13,7]dec-1-ylimino)methyl]-2-methoxyphenyl ester, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

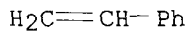
CM 1

CRN 99031-57-9
CMF C22 H27 N O3



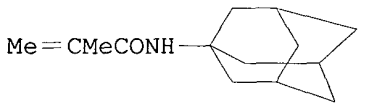
CM 2

CRN 100-42-5
CMF C8 H8

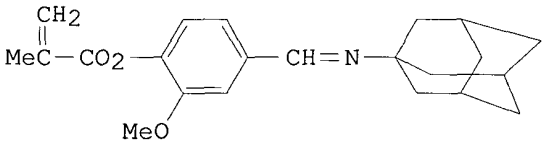


=> d bib abs hitstr 6

L21 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2001 ACS
AN 1985:600770 HCAPLUS
DN 103:200770
TI Preparation and in vitro hydrolysis of polymer antiviral agents having an amantadine residue
AU Sugiyama, Kazuo; Kinoshita, Keiko
CS Coll. Eng., Kinki Univ., Kure, Japan
SO Kinki Daigaku Kogakubu Kenkyu Hokoku (1984), 18, 27-33
CODEN: KDKHD3; ISSN: 0386-491X
DT Journal
LA Japanese
GI



I



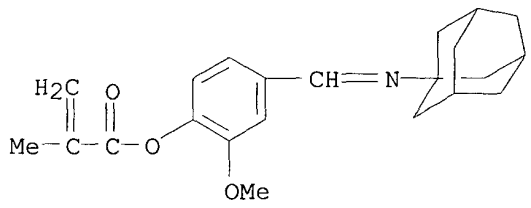
II

AB A new polymer having an amantadine residue was prepd. as a **pharmacol**. active macromol. compd. which showed the controlled slow release of a **drug** component by enzymic degrdn. or hydrolysis. The amantadine [768-94-5] was fixed either directly or by means of a spacer group to vinyl monomer to give monomers I [24886-70-2] and II [99031-57-9]. The monomers were then copolymd. with 2-(dimethylamino)ethyl methacrylate, styrene, and Me methacrylate. Hydrolysis of monomers and copolymers was carried out in water (pH 1-pH 7) at 37.degree..

IT **99031-58-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and hydrolysis of)
RN 99031-58-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 4-[(tricyclo[3.3.1.13,7]dec-1-ylimino)methyl]-2-methoxyphenyl ester, polymer with 2-methyl-N-tricyclo[3.3.1.13,7]dec-1-yl-2-propenamide (9CI) (CA INDEX NAME)

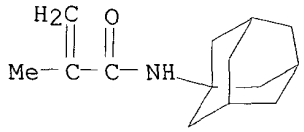
CM 1

CRN 99031-57-9
CMF C22 H27 N O3



CM 2

CRN 24886-70-2
CMF C14 H21 N O



Brueck 3/24/03 #1

SCHNIZER 09/627,787

=> d bib abs hitstr 1-43

L66 ANSWER 1 OF 43 HCAPLUS COPYRIGHT 2001 ACS
AN 2001:519335 HCAPLUS
DN 135:111977
TI **Diagnostic**/therapeutic agents having phospholipid-based microbubbles coupled to one or more vectors
IN Klaveness, Jo; Rongved, P.ANG.l; Hogset, Anders; Tolleshaug, Helge; Naevestad, Anne; Hellebust, Halldis; Hoff, Lars; Cuthbertson, Alan; Lovhaug, Dagfinn; Solbakken, Magne
PA Nycomed Imaging As, Norway
SO U.S., 89 pp., Cont.-in-part of U.S. Ser. No. 958,993.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 9

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6261537	B1	20010717	US 1997-960054	19971029
	CN 1234742	A	19991110	CN 1997-199047	19971028
PRAI	GB 1996-22366	A	19961028		
	GB 1996-22367	A	19961028		
	GB 1996-22368	A	19961028		
	GB 1997-699	A	19970115		
	GB 1997-8265	A	19970424		
	GB 1997-11842	A	19970606		
	GB 1997-11846	A	19970606		
	US 1997-49264	P	19970606		
	US 1997-49265	P	19970606		
	US 1997-49268	P	19970606		
	US 1997-958993	A2	19971028		

AB Targetable **diagnostic** and/or therapeutically active agents, e.g. ultrasound contrast agents, having reporters comprise gas-filled microbubbles stabilized by monolayers of film-forming surfactants, the reporter being coupled or linked to at least one vector. The gas is air, nitrogen, oxygen, carbon dioxide, hydrogen, an inert gas, a sulfur fluoride, selenium hexafluoride, a low mol. wt. hydrocarbon, a ketone, an ester, a halogenated low mol. wt. hydrocarbon or their mixts. The film-forming surfactant material is one or more phospholipids selected from the group consisting of phosphatidylserines, phosphatidylglycerols, phosphatidylinositols, phosphatidic acids and cardiolipins. A therapeutic agent is an antineoplastic agent, blood product, biol. response modifier, antifungal agent, hormone or hormone analog, vitamin, enzyme, antiallergic agent, tissue factor inhibitor, platelet inhibitor, coagulation protein target inhibitor, fibrin formation inhibitor, fibrinolysis promoter, antiangiogenic, circulatory **drug**, metabolic potentiator, antitubercular, antiviral, vasodilator, antibiotic, anti-inflammatory, antiprotozoal, antirheumatic, narcotic, opiate, cardiac glycoside, neuromuscular blocker, sedative, local anesthetic, general anesthetic or genetic material. For example, an endothelial cell adhesion of phosphatidylserine-encapsulated perfluorobutane microbubbles coated with polylysine was higher than adhesion of uncoated microbubbles. Also, a thrombus was detected by ultrasound in patients with suspected venous thrombosis using i.v. phosphatidylserine-encapsulated microbubbles. The

microbubbles contained inactivated human thrombin-succinyl-PEG 3400-distearoylphosphatidylethanolamine incorporated into the encapsulating membrane.

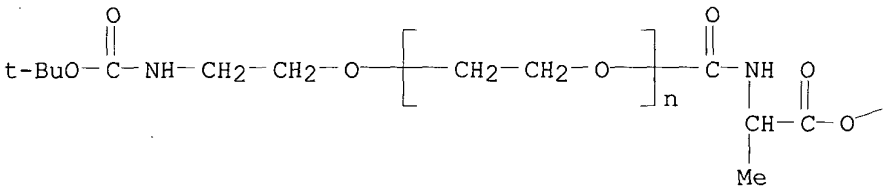
IT **207287-12-5P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of **diagnostic**/therapeutic agents having phospholipid-based gas-filled microbubbles coupled to one or more vectors)

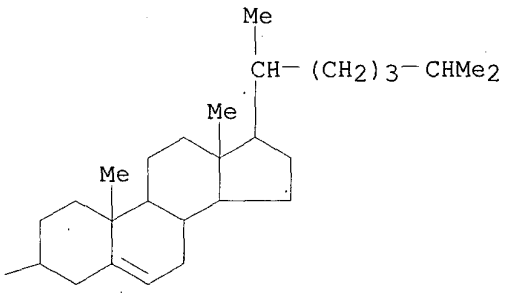
RN 207287-12-5 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-[[[2-[(3.beta.)-cholest-5-en-3-yloxy]-1-methyl-2-oxoethyl]amino]carbonyl]-.omega.-[2-[[(1,1-dimethylethoxy)carbonyl]amino]ethoxy]-, (S)- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



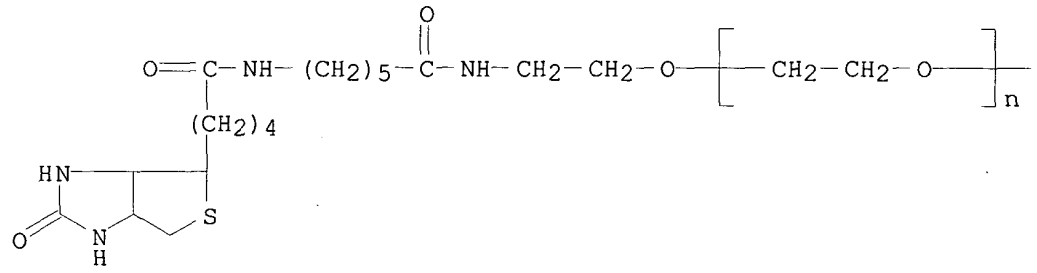
IT **207287-14-7P 207287-32-9P**

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of **diagnostic**/therapeutic agents having phospholipid-based gas-filled microbubbles coupled to one or more vectors)

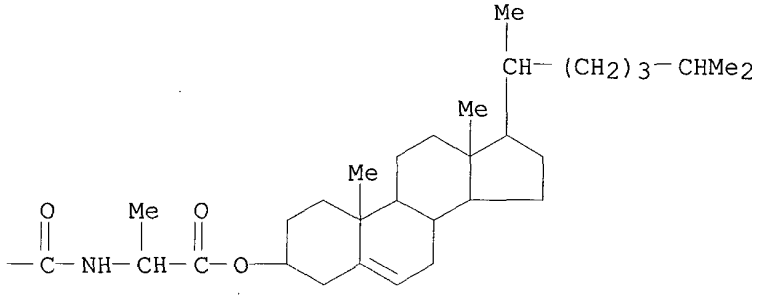
RN 207287-14-7 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),
.alpha.-[[[2-[(3.beta.)-cholest-5-en-3-yloxy]-1-
methyl-2-oxoethyl]amino]carbonyl]-.omega.-[2-[[6-[[5-(hexahydro-2-oxo-1H-
thieno[3,4-d]imidazol-4-yl)-1-oxopentyl]amino]-1-oxohexyl]amino]ethoxy]-,
stereoisomer (9CI) (CA INDEX NAME)

PAGE 1-A

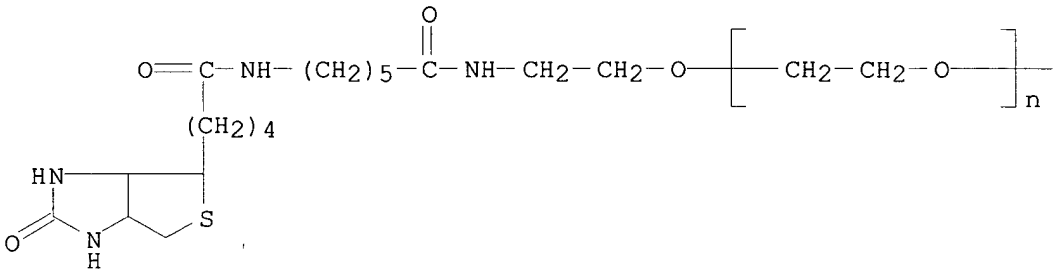


PAGE 1-B

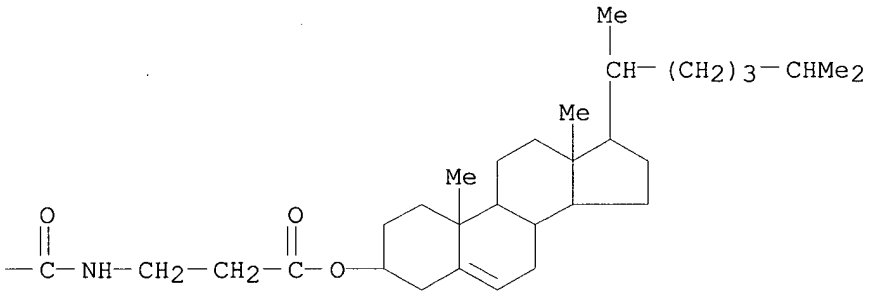


RN 207287-32-9 HCAPLUS
CN Poly(oxy-1,2-ethanediyl),
.alpha.-[[[3-[(3.beta.)-cholest-5-en-3-yloxy]-3-
oxopropyl]amino]carbonyl]-.omega.-[2-[[6-[[5-(hexahydro-2-oxo-1H-
thieno[3,4-d]imidazol-4-yl)-1-oxopentyl]amino]-1-oxohexyl]amino]ethoxy]-,
stereoisomer (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



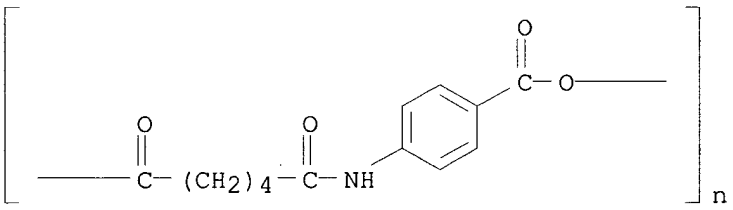
RE.CNT 49
RE
(1) Anon; WO 9115244 1991 HCAPLUS
(2) Anon; WO 9320802 1993 HCAPLUS
(4) Anon; WO 9407539 1994 HCAPLUS
(5) Anon; WO 9428873 1994 HCAPLUS
(6) Anon; WO 9428874 1994 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L66 ANSWER 2 OF 43 HCAPLUS COPYRIGHT 2001 ACS
AN 2001:413355 HCAPLUS
DN 135:153186
TI Synthesis and characterization of new biodegradable **fluorescing** poly(amide-anhydrides)
AU Jiang, H. L.; Zhu, K. J.; Dai, L. J.
CS Department of Polymer Science and Engineering, Zhejiang University, Hangzhou, 310027, Peop. Rep. China

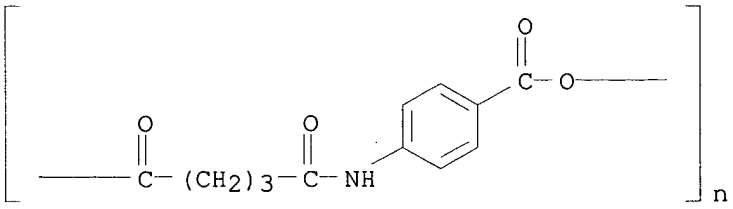
SO Polym. Int. (2001), 50(6), 722-727
CODEN: PLYIEI; ISSN: 0959-8103
PB John Wiley & Sons Ltd.
DT Journal
LA English
AB Biodegradable/alternate/poly(amide-anhydrides), [-C(O)PhNHC(O)(CH2)nC(O)O-]x, were synthesized by melt polycondensation, where n was 2, 3 or 4. The polymers have been characterized by NMR, DSC, wide-angle X-ray diffractometry and fluorometry. All the polymers are amorphous and their Tg ranges from 60 to 80.degree.. Poly(p-(carboxyethylformamido)benzoic anhydride) (PCEFB) as a film or in soln. in chloroform can emit strong **fluorescence**, which was not obsd. for the other two polyanhydrides (n = 3, 4). The max. emission wavelength varies with the excitation wavelength, 480 and 520 nm at the excitation wavelength of 470 nm, and 430 nm at 356 nm. In addn., the **fluorescence** intensities increase linearly with the mol. wt. of PCEFB. Such inherent **fluorescing** properties of PCEFB, together with its biodegradability, make the polymer a potential visible matrix for **drug delivery**.

IT **352464-07-4P 352464-08-5P 352464-09-6P 352464-10-9P 352464-11-0P 352464-12-1P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(biodegradable **fluorescent** poly(amide-anhydrides))

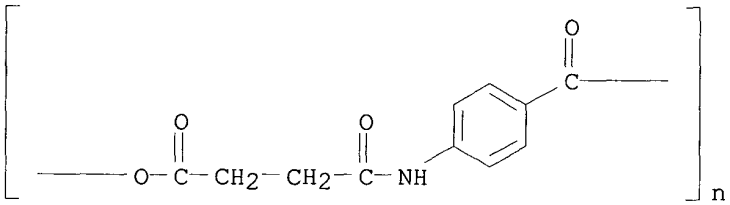
RN 352464-07-4 HCAPLUS
CN Poly[oxycarbonyl-1,4-phenyleneimino(1,6-dioxo-1,6-hexanediyl)] (9CI) (CA INDEX NAME)



RN 352464-08-5 HCAPLUS
CN Poly[oxycarbonyl-1,4-phenyleneimino(1,5-dioxo-1,5-pentanediyl)] (9CI) (CA INDEX NAME)



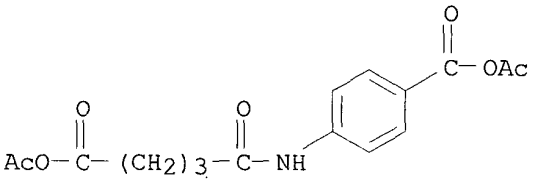
RN 352464-09-6 HCAPLUS
CN Poly[oxy(1,4-dioxo-1,4-butanediyl)imino-1,4-phenylenecarbonyl] (9CI) (CA INDEX NAME)



RN 352464-10-9 HCAPLUS
CN Benzoic acid, 4-[[4-(acetyloxy)-1,4-dioxobutyl]amino]-, anhydride with acetic acid, polymer with 4-[[5-(acetyloxy)-1,5-dioxopentyl]amino]benzoic acid anhydride with acetic acid (9CI) (CA INDEX NAME)

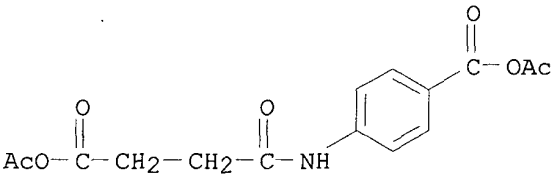
CM 1

CRN 352464-05-2
CMF C16 H17 N O7



CM 2

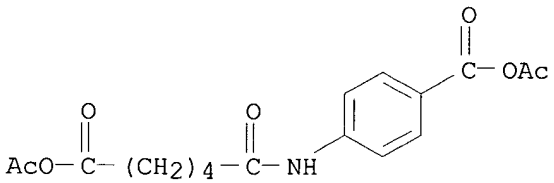
CRN 352464-04-1
CMF C15 H15 N O7



RN 352464-11-0 HCAPLUS
CN Benzoic acid, 4-[[4-(acetyloxy)-1,4-dioxobutyl]amino]-, anhydride with acetic acid, polymer with 4-[[6-(acetyloxy)-1,6-dioxohexyl]amino]benzoic acid anhydride with acetic acid (9CI) (CA INDEX NAME)

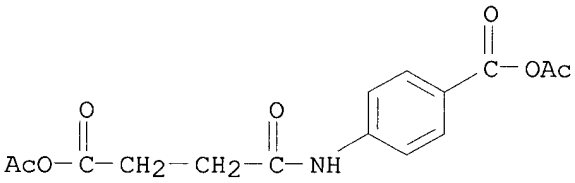
CM 1

CRN 352464-06-3
CMF C17 H19 N O7



CM 2

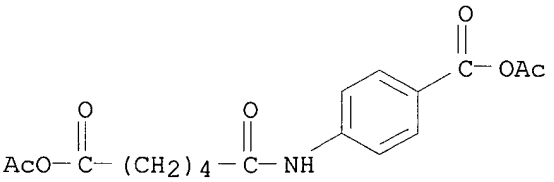
CRN 352464-04-1
CMF C15 H15 N O7



RN 352464-12-1 HCAPLUS
CN Benzoic acid, 4-[[6-(acetyloxy)-1,6-dioxohexyl]amino]-, anhydride with acetic acid, polymer with 4-[[5-(acetyloxy)-1,5-dioxopentyl]amino]benzoic acid anhydride with acetic acid (9CI) (CA INDEX NAME)

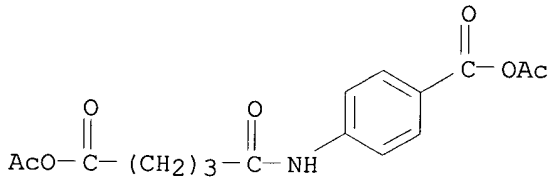
CM 1

CRN 352464-06-3
CMF C17 H19 N O7



CM 2

CRN 352464-05-2
CMF C16 H17 N O7



RE.CNT 14
RE
(1) Anseth, K; Natural Biotechnol 1999, V17, P156 HCAPLUS
(3) Erdmann, L; Polym Prepr 1998, V39, P224 HCAPLUS
(5) Furr, B; J Controlled Release 1992, V21, P117 HCAPLUS
(6) Jiang, H; Biomaterials 2001, V22, P211 HCAPLUS
(8) Lacasse, F; Pharm Res 1998, V15, P312 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L66 ANSWER 3 OF 43 HCAPLUS COPYRIGHT 2001 ACS
AN 2000:881116 HCAPLUS
DN 134:56426
TI Preparation of molecules containing aminooxy groups as valency platform molecules for preparation of bioconjugates.
IN Jones, David S.; Ton-nu, Huong-thu; Xie, Fang; Tao, Anping; Xu, Tong; Hammaker, Jeffrey Robert
PA La Jolla Pharmaceutical Co., USA
SO PCT Int. Appl., 113 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

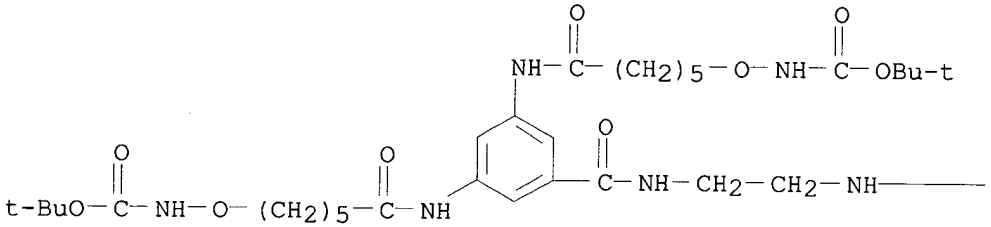
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000075105	A1	20001214	WO 2000-US15968	20000608

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

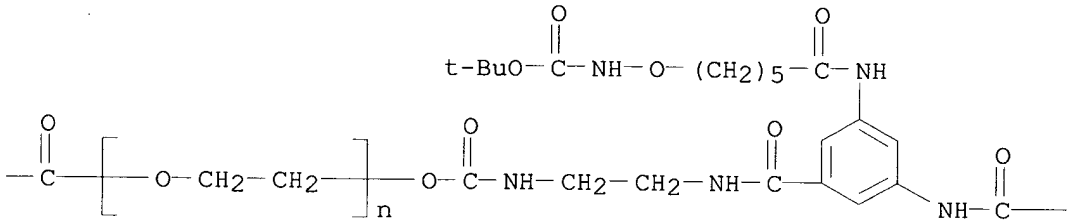
PRAI US 1999-138260 P 19990608
AB Oxyalkylene mols. contg. .gtoreq.3 aminooxy groups were prepd. Thus, MeO(CH2CH2O)nCH2CH2O2CN[CH2CH2OCH2CH2O2CN[CH2CH2NHCO(CH2)5NHCO(CH2)5ONH2]2]2 (n = approx. 503) (prepn. outlined) was stirred with Domain 1 polypeptide .beta.2GPI-glyoxylic acid reaction product to give the tetraadduct, which at 0.17 nmol/rat gave 61% suppression of anti-Domain 1 antibody in immunized rats.
IT **313391-07-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of mols. contg. aminooxy groups as valency platform mols. for

prepn. of **bioconjugates**)
RN 313391-07-0 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-[[[2-[[3,5-bis[[6-[[[(1,1-dimethylethoxy)carbonyl]amino]oxy]-1-oxohexyl]amino]benzoyl]amino]ethyl]amino]carbonyl]-.omega.-[[[[2-[[3,5-bis[[6-[[[(1,1-dimethylethoxy)carbonyl]amino]oxy]-1-oxohexyl]amino]benzoyl]amino]ethyl]amino]carbonyl]oxy]- (9CI) (CA INDEX NAME)

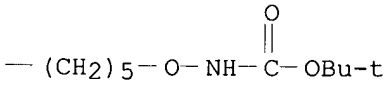
PAGE 1-A



PAGE 1-B



PAGE 1-C



RE.CNT 3
RE
(1) Coutts, S; US 5606047 A 1997 HCAPLUS
(2) La Jolla; EP 0642798 A 1995 HCAPLUS
(3) La Jolla; WO 9964595 A 1999 HCAPLUS

L66 ANSWER 4 OF 43 HCAPLUS COPYRIGHT 2001 ACS
AN 2000:880999 HCAPLUS
DN 134:46793
TI Modification of biological elements by coating with multivalent polymers
IN Seymour, Leonard Charles William; Fisher, Kerry David
PA Cancer Research Campaign Technology Limited, UK
SO PCT Int. Appl., 58 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000074722	A2	20001214	WO 2000-GB2239	20000609
	WO 2000074722	A3	20010712		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI GB 1999-13359 A 19990609

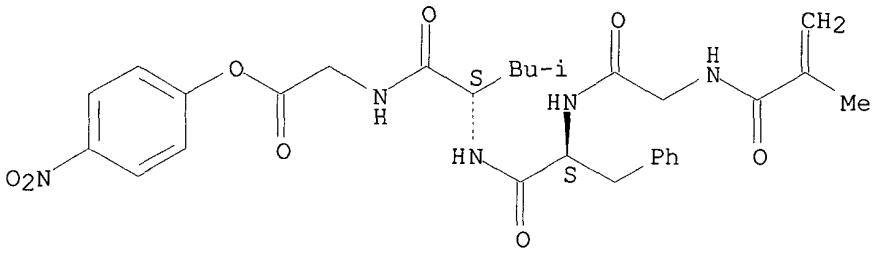
AB A method of modifying the biol. and/or physicochem. properties of biol. elements such as viruses and other micro-organisms is disclosed in which the biol. element is modified by providing it with a coating of a multivalent polymer having multiple reactive groups. This modification can enable some biol. elements to be targeted or re-targeted to particular sites in a host biol. system and can be useful in connection with viral vectors for gene therapy or antitumor therapy. In other cases the modification can be useful for enhancing or improving the efficiency of viruses or bacterial micro-organisms used for example in pest control, degrdn. and dispersal of oil deposits and various other industrial, environment or **medical** applications. Concd. baculovirus particles (5x108 particles/mL) in 100 .mu.L of PBS and 50 mM HEPES pH 7.4 were treated with 500 .mu.g of poly(N-2-hydroxypropylmethacrylamide)-Gly-Gly-ONp for 2 h on ice. For retargeting modified viruses, 10-100 .mu.g of targeting ligand (bFGF) was then added for a further 1 h. After that, 0.1% aminoethanol was added to complete reaction with any spare ester groups.

IT **100424-72-4P**
RL: AGR (Agricultural use); NUU (Nonbiological use, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(modification of biol. elements by coating with multivalent polymers for therapy, pest control and treatment of oil pollutions)
RN 100424-72-4 HCAPLUS
CN Glycine, N-(2-methyl-1-oxo-2-propenyl)glycyl-L-phenylalanyl-L-leucyl-, 4-nitrophenyl ester, polymer with N-(2-hydroxypropyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

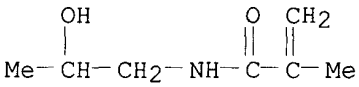
CRN 100424-71-3
CMF C29 H35 N5 O8
CDES 5:L,L

Absolute stereochemistry.



CM 2

CRN 21442-01-3
CMF C7 H13 N O2

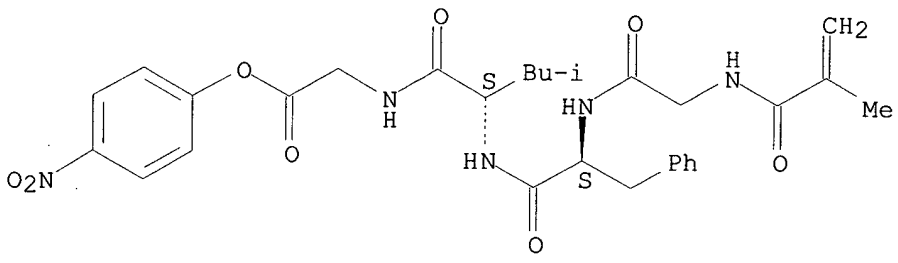


IT **312691-54-6P 312691-55-7P**
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(modification of biol. elements by coating with multivalent polymers for therapy, pest control and treatment of oil pollutions)
RN 312691-54-6 HCAPLUS
CN 2-5-Tachykinin-related peptide Ib (Cancer borealis), N-(2-methyl-1-oxo-2-propenyl)-, 4-nitrophenyl ester, polymer with N-(2-hydroxypropyl)-2-methyl-2-propenamide, graft (9CI) (CA INDEX NAME)

CM 1

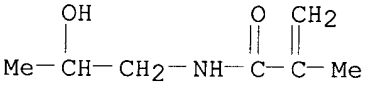
CRN 100424-71-3
CMF C29 H35 N5 O8
CDES 5:L,L

Absolute stereochemistry.



CM 2

CRN 21442-01-3
CMF C7 H13 N O2

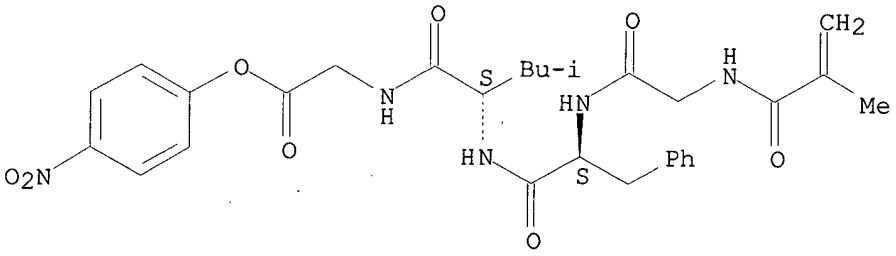


RN 312691-55-7 HCAPLUS
CN 2-5-Tachykinin-related peptide Ib (Cancer borealis), N-(2-methyl-1-oxo-2-propenyl)-, 4-nitrophenyl ester, polymer with N-(2-hydroxypropyl)-2-methyl-2-propenamide and (9Z)-9-octadecen-1-amine, graft (9CI) (CA INDEX NAME)

CM 1

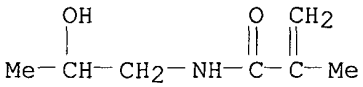
CRN 100424-71-3
CMF C29 H35 N5 O8
CDES 5:L,L

Absolute stereochemistry.



CM 2

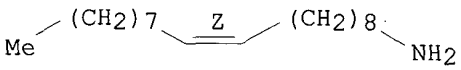
CRN 21442-01-3
CMF C7 H13 N O2



CM 3

CRN 112-90-3
CMF C18 H37 N
CDES 2:Z

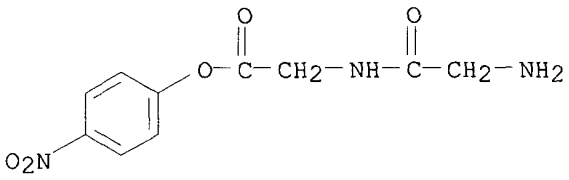
Double bond geometry as shown.



IT **87880-91-9**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(modification of biol. elements by coating with multivalent polymers for therapy, pest control and treatment of oil pollutions)
RN 87880-91-9 HCAPLUS
CN Glycine, N-glycyl-, 4-nitrophenyl ester, polymer with N-(2-hydroxypropyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

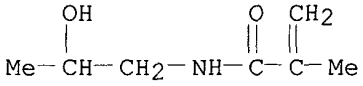
CM 1

CRN 87880-90-8
CMF C10 H11 N3 O5



CM 2

CRN 21442-01-3
CMF C7 H13 N O2



L66 ANSWER 5 OF 43 HCAPLUS COPYRIGHT 2001 ACS
AN 2000:790281 HCAPLUS
DN 133:355236
TI Amplification of folate-mediated targeting to tumor cells using polymers
IN Russell-jones, Gregory John; Mcewan, John Fergus
PA Biotech Australia Pty Limited, Australia
SO PCT Int. Appl., 36 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000066091	A1	20001109	WO 2000-AU406	20000504

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI AU 1999-147 A 19990504

AB The invention relates to the **delivery** of **drug**, peptide and protein **pharmaceuticals** using the folate-mediated uptake system. More particularly the invention relates to the amplification of **drug/pharmaceutical delivery** with the folate uptake system using a folate-polymer complex. The invention also relates to processes for prepg. the complexes, **pharmaceutical** compns. contg. same, methods of treatment involving the complexes and uses of the complexes in the manuf. of **pharmaceuticals**. An N-(2-hydroxypropyl)methacrylamide (HPMA) copolymer was synthesized as a polymer backbone for the incorporation and derivatization with both the cytotoxic **drug**, daunomycin and folate. A biodegradable polymer (HPMA-GFLG) was synthesized by the free radical copolymn. of HPMA with N-methacryloylglycylphenylleucinylglycine p-nitrophenol ester. To incorporate daunomycin and folate onto the polymers, they were treated with a 10-M excess of a mixt. of aminohexyl-folate and daunomycin. Unreacted nitrophenyl esters were subjected to aminolysis by the addn. of 1-amino-2-propanol.

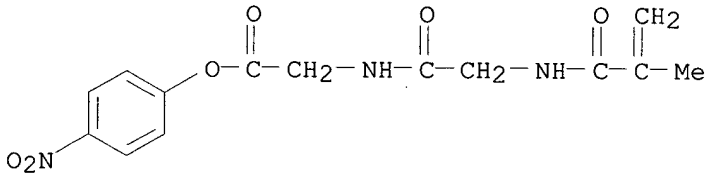
IT **57950-81-9DP**, reaction products with folate derivs. and antitumor agents **100424-72-4DP**, reaction products with folate derivs. and antitumor agents
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(amplification of folate-mediated targeting to tumor cells using polymers)

RN 57950-81-9 HCAPLUS
CN Glycine, N-(2-methyl-1-oxo-2-propenyl)glycyl-, 4-nitrophenyl ester, polymer with N-(2-hydroxypropyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

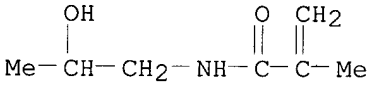
CRN 57950-79-5

CMF C14 H15 N3 O6



CM 2

CRN 21442-01-3
CMF C7 H13 N O2

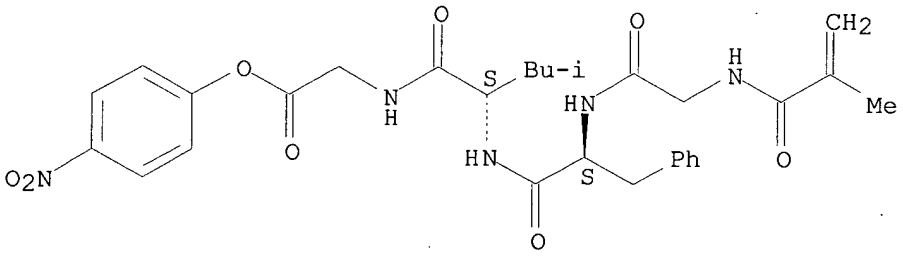


RN 100424-72-4 HCAPLUS
CN Glycine, N-(2-methyl-1-oxo-2-propenyl)glycyl-L-phenylalanyl-L-leucyl-, 4-nitrophenyl ester, polymer with N-(2-hydroxypropyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

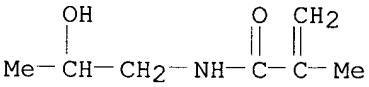
CRN 100424-71-3
CMF C29 H35 N5 O8
CDES 5:L,L

Absolute stereochemistry.



CM 2

CRN 21442-01-3
CMF C7 H13 N O2



RE.CNT 4
RE
(1) Apollon Inc; WO 9610038 A 1996 HCAPLUS
(2) Ginobbi, P; Anticancer Research 1997, V17, P29 HCAPLUS
(3) The University Of Nottingham; WO 9725067 A 1997 HCAPLUS
(4) Weiner, E; Investigative Radiology 1997, V32(12), P748

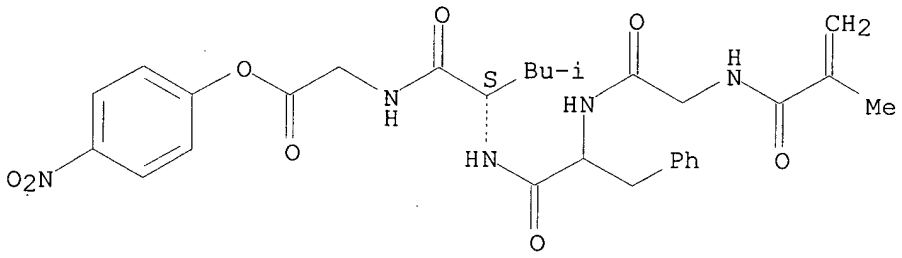
L66 ANSWER 6 OF 43 HCAPLUS COPYRIGHT 2001 ACS
AN 2000:543624 HCAPLUS
DN 134:13801
TI A versatile system for receptor-mediated gene **delivery** permits increased entry of **DNA** into target cells, enhanced **delivery** to the nucleus and elevated rates of transgene expression
AU Fisher, K. D.; Ulbrich, K.; Subr, V.; Ward, C. M.; Mautner, V.; Blakey, D.; Seymour, L. W.
CS CRC Institute for Cancer Studies, University of Birmingham, B15 2TA, UK
SO Gene Ther. (2000), 7(15), 1337-1343
CODEN: GETHEC; ISSN: 0969-7128
PB Nature Publishing Group
DT Journal
LA English
AB We have developed a method for stabilization of polyelectrolyte gene **delivery** vectors by crosslinking their surfaces with biodegradable multivalent copolymers based on N-(2-hydroxypropyl)methacrylamide (HPMA). The resulting nanoparticulate vectors resist attack by serum proteins and can be modified for cell-specific **delivery** by incorporation of targeting ligands onto the polymer coating. Here we show that vascular endothelial growth factor (VEGF), transferrin and basic fibroblast growth factor (bFGF) can each be linked to polyHPMA-coated poly(L-lysine)/ **DNA** complexes. All ligand-targeted complexes demonstrated increased uptake into receptor-pos. cells (measured using plasmids contg. 32P-dCTP), that could be antagonized with excess free ligand. Targeted complexes also showed increased transfection, resistant to inhibition by serum, suggesting the possibility of effective application in vivo. Anal. using **fluorescence** microscopy confirmed enhanced uptake of ligand-targeted complexes (using Texas Red-labeled plasmid **DNA**), although VEGF- and transferrin-targeted complexes were restricted to cytoplasmic or perinuclear distributions. In contrast, bFGF-targeted complexes showed efficient **delivery** into the nucleus, with accumulation of more than 100 000 plasmids per cell within distinct intranuclear compartments. This method permits versatile targeting of genes to selected cells and may also permit manipulation of intracellular trafficking. It should find several important applications in gene **delivery** systems both in vitro and in vivo.
IT **228705-68-8**
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(versatile system for receptor-mediated gene **delivery** permits increased entry of **DNA** into target cells, enhanced

delivery to nucleus and elevated rates of transgene expression)
RN 228705-68-8 HCAPLUS
CN Glycine, N-(2-methyl-1-oxo-2-propenyl)glycylphenylalanyl-L-leucyl-, 4-nitrophenyl ester, polymer with N-(2-hydroxypropyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

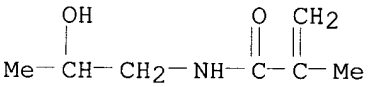
CRN 213338-44-4
CMF C29 H35 N5 O8

Absolute stereochemistry.



CM 2

CRN 21442-01-3
CMF C7 H13 N O2



RE.CNT 24
RE
(1) Anderson, W; Nature 1998, V392, P25 HCAPLUS
(2) Blessing, T; Proc Natl Acad Sci USA 1998, V95, P1427 HCAPLUS
(3) Dash, P; Gene Therapy 1999, V6, P643 HCAPLUS
(4) Dash, P; J Biol Chem 2000, V275, P3793 HCAPLUS
(5) Dellera, P; Exp Cell Res 1991, V192, P505 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L66 ANSWER 7 OF 43 HCAPLUS COPYRIGHT 2001 ACS
AN 2000:535199 HCAPLUS
DN 133:155432
TI Preparation of biomaterials formed by nucleophilic addition reaction to conjugated unsaturated polymers
IN Hubbell, Jeffrey A.; Elbert, Donald; Lutolf, Matthias; Pratt, Alison; Schoenmakers, Ronald; Tirelli, Nicola; Vernon, Brent
PA Switz.
SO PCT Int. Appl., 119 pp.
CODEN: PIXXD2
DT Patent

LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000044808	A1	20000803	WO 2000-US2608	20000201

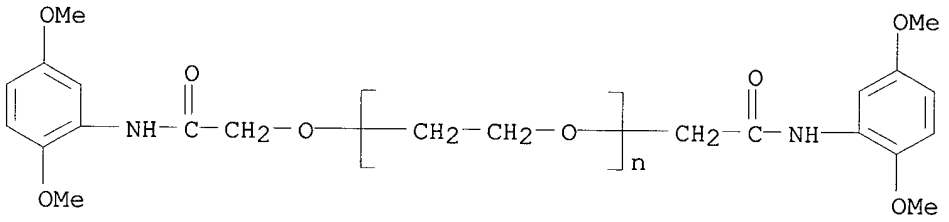
W: AU, BR, CA, CN, CZ, GE, HU, ID, IL, IS, JP, KR, MX, NO, NZ, PL, RO, RU, SG, TR, UA, US, YU
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

PRAI US 1999-118093 A2 19990201

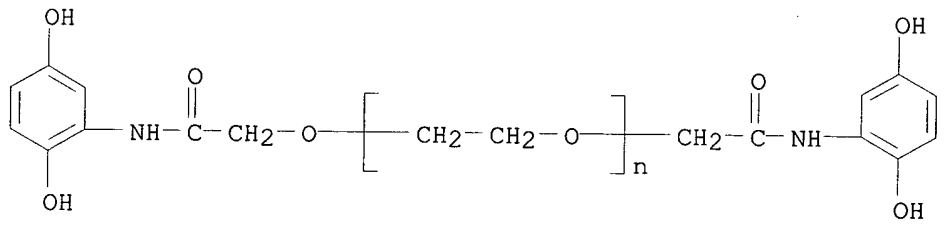
AB The invention features polymeric biomaterials formed by nucleophilic addn. reactions to conjugated unsatd. groups. These biomaterials may be used for **medical** treatments. Thus, polyethylene glycol triacrylate was dissolved in pH 8 50-mM HEPES buffered saline at 20% with 2% albumin. PEG dithiol was dissolved in pH 5.6 1-mM MES buffered saline at 20%. The liq. soln. was added to cyclohexane contg. Hypermer B239. The polymd., protein-contg. spheres were then washed with cyclohexane to remove surfactant, followed by drying in vacuum to remove cyclohexane. The particles were then resuspended in pH 7.4 HEPES buffered saline. Protein concns. in the resuspending medium were detd. from a concn. std. curve for albumin at 280 nm.

IT **287184-67-2P 287184-68-3P 287184-69-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of biomaterials formed by nucleophilic addn. reaction to **conjugated** unsatd. polymers)

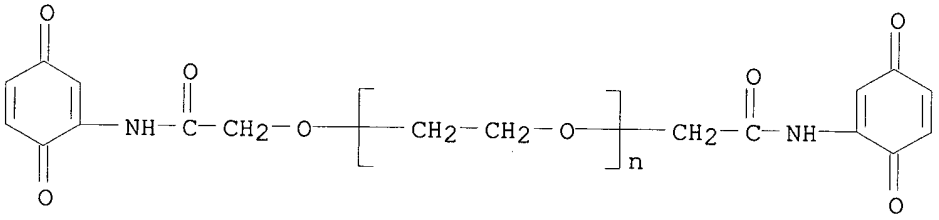
RN 287184-67-2 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-[2-[(2,5-dimethoxyphenyl)amino]-2-oxoethyl]-.omega.-[2-[(2,5-dimethoxyphenyl)amino]-2-oxoethoxy]- (9CI) (CA INDEX NAME)



RN 287184-68-3 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-[2-[(2,5-dihydroxyphenyl)amino]-2-oxoethyl]-.omega.-[2-[(2,5-dihydroxyphenyl)amino]-2-oxoethoxy]- (9CI) (CA INDEX NAME)



RN 287184-69-4 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-[2-[(3,6-dioxo-1,4-cyclohexadien-1-yl)amino]-2-oxoethyl]-.omega.-[2-[(3,6-dioxo-1,4-cyclohexadien-1-yl)amino]-2-oxoethoxy]- (9CI) (CA INDEX NAME)



RE.CNT 4
RE
(1) Greenwald; US 5567422 A 1996 HCAPLUS
(2) Grinstaff; US 5635207 A 1997 HCAPLUS
(3) Ribi; US 5268305 A 1993 HCAPLUS
(4) Ribi; US 5427915 A 1995 HCAPLUS

L66 ANSWER 8 OF 43 HCAPLUS COPYRIGHT 2001 ACS
AN 2000:535191 HCAPLUS
DN 133:151095
TI Temperature-responsive polymer compound and process for producing the same
IN Akiyama, Yoshikatsu; Yoshizako, Kimihiro; Hasegawa, Yukio; Okano, Teruo
PA Amersham Pharmacia Biotech K.K., Japan
SO PCT Int. Appl., 178 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000044800	A1	20000803	WO 2000-JP510	20000131
	W: AU, CA, CN, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	JP 2000219708	A2	20000808	JP 1999-23245	19990129
	JP 2000219709	A2	20000808	JP 1999-23246	19990129
	JP 2000319335	A2	20001121	JP 1999-127211	19990507

	JP 2000344835	A2	20001212	JP 1999-161372	19990608
	JP 2000344834	A2	20001212	JP 1999-162486	19990609
PRAI	JP 1999-23245	A	19990129		
	JP 1999-23246	A	19990129		
	JP 1999-127211	A	19990507		
	JP 1999-161372	A	19990608		
	JP 1999-162486	A	19990609		

AB A temp.-responsive polymer and polymer material which has ester bond(s) and/or acid amide bond(s) resp. at one or more sites in the side chain and
can be arbitrarily controlled by varying the side chain is provided. The process for prodn. thereof and the use thereof are also provided. The polymers are typically used. in chromatog. packings. Acetamidopropyl methacrylate was prepd. and polymd. to give a temp.-responsive polymer.

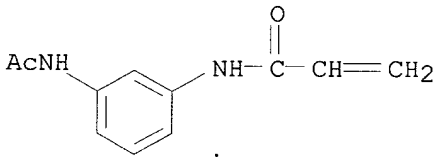
IT **287382-94-9P 287382-95-0P 287382-96-1P**
287382-97-2P 287382-98-3P 287382-99-4P
287396-89-8P
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(temp.-responsive polymer compd. and process for producing the same)

RN 287382-94-9 HCAPLUS

CN 2-Propenamide, N-[3-(acetylamino)phenyl]-, polymer with 2-propenamide (9CI) (CA INDEX NAME)

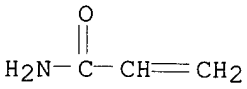
CM 1

CRN 287382-92-7
CMF C11 H12 N2 O2



CM 2

CRN 79-06-1
CMF C3 H5 N O

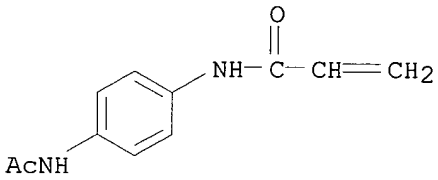


RN 287382-95-0 HCAPLUS

CN 2-Propenamide, N-[4-(acetylamino)phenyl]-, polymer with 2-propenamide (9CI) (CA INDEX NAME)

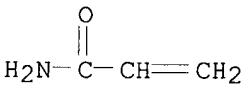
CM 1

CRN 287382-93-8
CMF C11 H12 N2 O2



CM 2

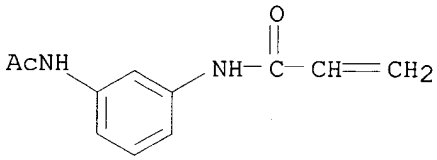
CRN 79-06-1
CMF C3 H5 N O



RN 287382-96-1 HCAPLUS
CN 2-Propenamide, N,N-dimethyl-, polymer with N-[3-(acetylamino)phenyl]-2-propenamide (9CI) (CA INDEX NAME)

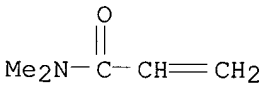
CM 1

CRN 287382-92-7
CMF C11 H12 N2 O2



CM 2

CRN 2680-03-7
CMF C5 H9 N O

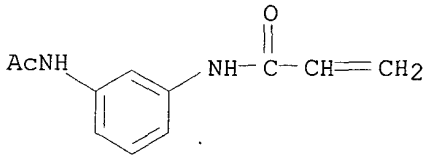


RN 287382-97-2 HCAPLUS

CN 2-Propenamide, N-[3-(acetylamino)phenyl]-, polymer with N-(hydroxymethyl)-2-propenamide (9CI) (CA INDEX NAME)

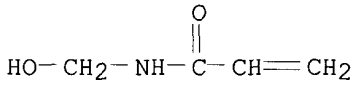
CM 1

CRN 287382-92-7
CMF C11 H12 N2 O2



CM 2

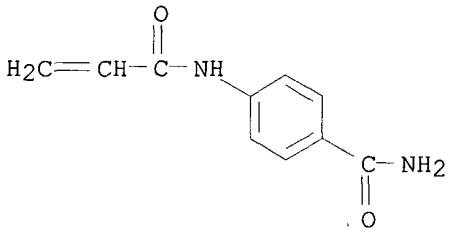
CRN 924-42-5
CMF C4 H7 N O2



RN 287382-98-3 HCAPLUS
CN Benzamide, 4-[(1-oxo-2-propenyl)amino]-, polymer with 2-propenamide (9CI) (CA INDEX NAME)

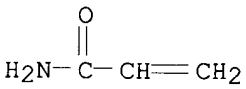
CM 1

CRN 17090-31-2
CMF C10 H10 N2 O2



CM 2

CRN 79-06-1
CMF C3 H5 N O

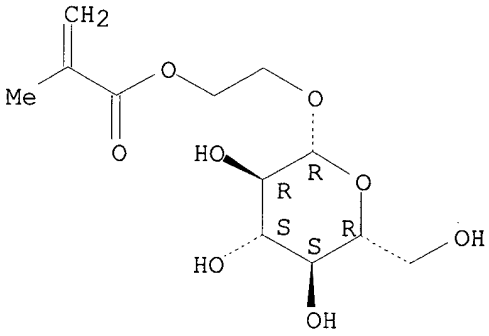


RN 287382-99-4 HCAPLUS
CN .beta.-D-Glucopyranoside, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl, polymer
with 4-[(1-oxo-2-propenyl)amino]benzamide (9CI) (CA INDEX NAME)

CM 1

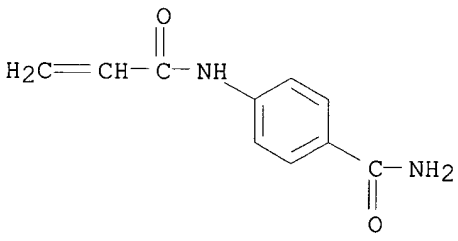
CRN 47087-43-4
CMF C12 H20 O8
CDES 5:B-D-GLUCO

Absolute stereochemistry.



CM 2

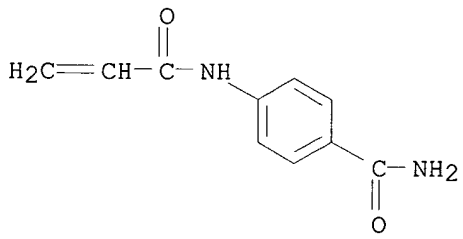
CRN 17090-31-2
CMF C10 H10 N2 O2



RN 287396-89-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, monoester with 1,2,3-propanetriol, polymer with 4-[(1-oxo-2-propenyl)amino]benzamide (9CI) (CA INDEX NAME)

CM 1

CRN 17090-31-2
CMF C10 H10 N2 O2

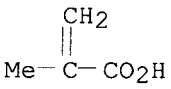


CM 2

CRN 50853-28-6
CMF C7 H12 O4
CCI IDS
CDES 8:ID

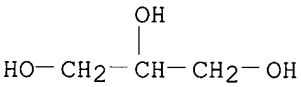
CM 3

CRN 79-41-4
CMF C4 H6 O2



CM 4

CRN 56-81-5
CMF C3 H8 O3

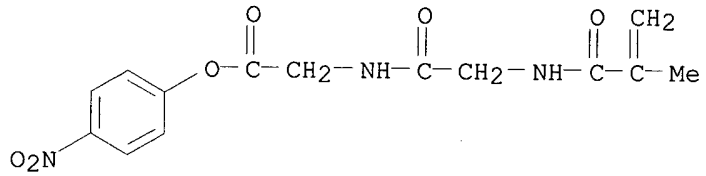


RE.CNT 16
RE
(1) Bayer Ag; EP 0394787 A 1990 HCAPLUS
(2) Biowhittaker Molecular Applic; WO 0007002 A 2000 HCAPLUS
(3) Ceskoslovenska Akademie Ved; GB 1409967 A 1975 HCAPLUS
(4) Dsm Nv; EP 0970945 A 2000 HCAPLUS
(5) Eastman Kodak Company; US 2458420 A 1949 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L66 ANSWER 9 OF 43 HCAPLUS COPYRIGHT 2001 ACS
AN 2000:445977 HCAPLUS
DN 133:187662
TI The influence of cytotoxicity of macromolecules and of VEGF gene modulated vascular permeability on the enhanced permeability and retention effect in resistant solid tumors
AU Minko, Tamara; Kopeckova, Pavla; Pozharov, Vitaliy; Jensen, Keith D.; Kopecek, Jindrich
CS Department of Pharmaceutics and Pharmaceutical Chemistry, University of Utah, Salt Lake City, UT, USA
SO Pharm. Res. (2000), 17(5), 505-514
CODEN: PHREEB; ISSN: 0724-8741
PB Kluwer Academic/Plenum Publishers
DT Journal
LA English
AB To study the influence of cytotoxicity of macromols., VEGF gene expression, and vascular permeability on the enhanced permeability and retention (EPR) effect. Mice bearing xenografts of A2780 multidrug resistant human ovarian carcinoma were treated by free doxorubicin (DOX) and N-(2-hydroxypropyl)methacrylamide (HPMA) copolymer-bound DOX (P(GFLG)-DOX), Texas Red (P-TR), and FITC (P-FITC). Antitumor activity, **drug** distribution in tumor, vascular permeability, VEGF gene expression, and **DNA** fragmentation were studied. The accumulation of free DOX led to the VEGF gene overexpression and increased the vascular permeability, which in turn enhanced the **drug** accumulation in the same location. This pos. feedback loop led to a highly inhomogeneous distribution of the **drug** within the tumor. In contrast, P(GFLG)-DOX down-regulated the VEGF gene and decreased vascular permeability. This neg. feedback seemed to prevent addnl. **drug** accumulation in dead necrotic tissue, resulting in a more uniform **drug** distribution and enhanced the antitumor activity. P(GFLG)-DOX. The EPR effect significantly differed for macromols. contg. DOX when compared to macromols. without **drug**. The cytotoxicity of P(GFLG)-DOX amplified the EPR effect, led to a more homogeneous distribution of the **drug**, increased the av. **drug** concn. in tumor and augmented its efficacy.
IT **57950-81-9D, conjugated** with FITC **100424-72-4D, conjugated** with doxorubicin
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(influence of cytotoxicity of macromols. and of VEGF gene modulated vascular permeability on the enhanced permeability and retention effect in resistant solid tumors)
RN 57950-81-9 HCAPLUS
CN Glycine, N-(2-methyl-1-oxo-2-propenyl)glycyl-, 4-nitrophenyl ester, polymer with N-(2-hydroxypropyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

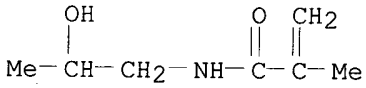
CM 1

CRN 57950-79-5
CMF C14 H15 N3 O6



CM 2

CRN 21442-01-3
CMF C7 H13 N O2

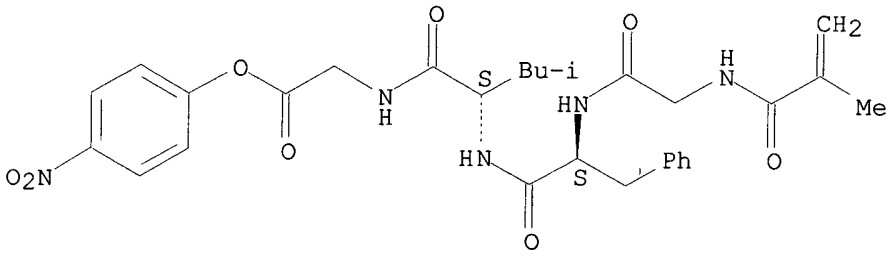


RN 100424-72-4 HCAPLUS
CN Glycine, N-(2-methyl-1-oxo-2-propenyl)glycyl-L-phenylalanyl-L-leucyl-, 4-nitrophenyl ester, polymer with N-(2-hydroxypropyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

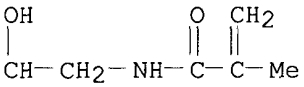
CRN 100424-71-3
CMF C29 H35 N5 O8
CDES 5:L,L

Absolute stereochemistry.



CM 2

CRN 21442-01-3
CMF C7 H13 N O2



RE.CNT 30
RE
(1) Benjamin, L; J Clin Invest 1999, V103, P159 HCAPLUS
(2) Berse, B; Mol Biol Cell 1992, V3, P211 HCAPLUS
(4) Ferrara, N; Biochem Biophys Res Commun 1989, V161, P851 HCAPLUS
(5) Hobbs, S; Proc Natl Acad Sci USA 1998, V95, P4607 HCAPLUS
(6) Kopecek, J; US 5037883 1991 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L66 ANSWER 10 OF 43 HCAPLUS COPYRIGHT 2001 ACS
AN 2000:384558 HCAPLUS
DN 133:28235
TI Preparation of nanoparticles with polymer shells for use in assays
IN Mirkin, Chad A.; Nguyen, Sonbinh T.
PA Nanosphere LLC, USA
SO PCT Int. Appl., 65 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000033079	A1	20000608	WO 1999-US28387	19991130
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	EP 1135682	A1	20010926	EP 1999-962951	19991130
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
PRAI	US 1998-110327	P	19981130		
	WO 1999-US28387	W	19991130		

OS MARPAT 133:28235
AB The invention provides a method of prepg. nanoparticles having at least one polymer shell attached to them, each polymer shell having a selected property or properties. The method comprises attaching initiation monomers to the surfaces of the nanoparticles, contacting the nanoparticles having the initiation monomers attached to them with a transition metal ring-opening metathesis catalyst to activate the initiation monomers, and contacting the nanoparticles with one or more types of propagation monomers of the formula P-L-N under conditions effective so that the monomers are polymd. to form the one or more polymer shells. In the formula P-L-N, N is a cyclic olefin-contg. group, P is a moiety which gives each polymer shell a selected property or properties, and L is a bond or linker. The invention also provides polymers formed by

polymg. the propagation monomers. The invention further provides the nanoparticles, the initiation monomers, and propagation monomers of formula P-L-N wherein P is a moiety having a property selected from the group consisting of redox activity, optical activity, elec. activity and magnetic activity, and L and N are defined above. The invention also provides binding monomers of formula B-L-N, wherein B is a binding moiety that binds specifically to an analyte, and N and L are defined above. Finally, the invention provides methods and kits for detecting or quantitating an analyte.

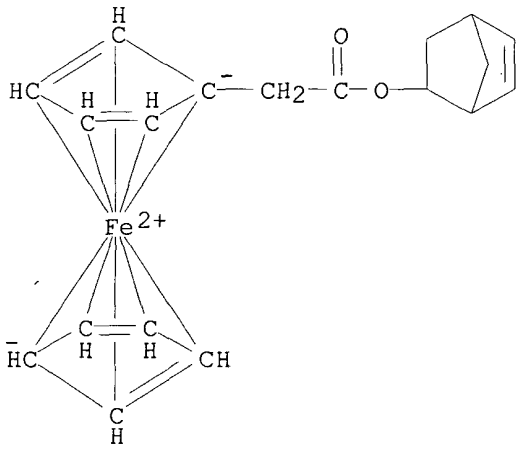
IT **220577-93-5DP**, gold nanoparticle-immobilized
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of nanoparticles with polymer shells for use in assays)

RN 220577-93-5 HCAPLUS

CN Ferrocene, [[(1R,2S,4R)-bicyclo[2.2.1]hept-5-en-2-yloxy]carbonyl]-, rel-, polymer with rel-[2-[(1R,2S,4R)-bicyclo[2.2.1]hept-5-en-2-yloxy]-2-oxoethyl]ferrocene (9CI) (CA INDEX NAME)

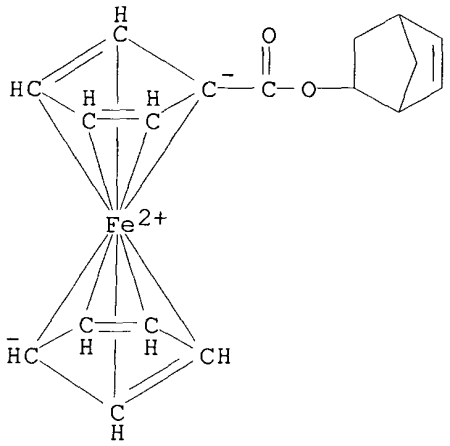
CM 1

CRN 220577-89-9
CMF C19 H20 Fe O2
CCI CCS
CDES 2:EXO



CM 2

CRN 220577-87-7
CMF C18 H18 Fe O2
CCI CCS
CDES 2:EXO



RE.CNT 8
RE
(1) Akasaki; US 4846893 A 1989 HCAPLUS
(3) Goto; US 5053471 A 1991 HCAPLUS
(4) Grubbs; US 5342909 A 1994 HCAPLUS
(6) Perronin; US 4023981 A 1977 HCAPLUS
(7) Siiman; US 5639620 A 1997 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L66 ANSWER 11 OF 43 HCAPLUS COPYRIGHT 2001 ACS
AN 2000:277236 HCAPLUS
DN 133:27204
TI A facile synthesis of a glycoconjugate cationic polymer carrying the 3,6-branched .alpha.-D-mannosyl trisaccharide cluster
AU Tanaka, Hidehiko; Nishida, Yoshihiro; Kobayashi, Kazukiyo
CS Department of Molecular Design and Engineering, Graduate School of Engineering, Nagoya University, Nagoya, 464-8063, Japan
SO J. Carbohydr. Chem. (2000), 19(3), 413-418
CODEN: JCACDM; ISSN: 0732-8303
PB Marcel Dekker, Inc.
DT Journal
LA English
AB The synthesis of a 3,6-branched mannose polymer was carried out as follows: random mannosylation on p-nitrophenyl (pNP) .alpha.-D-mannopyranoside using per-O-acetyl-.alpha.-D-mannopyranosyl imidate, catalytic hydrogenation of pNP group, N-acryloylation, and Zemplen's de-O-acetylation gave polymerizable N-acrylamido 3,6-branched mannoside monomer. The monomer was radically copolymd. with 2-acrylamido-N,N-dimethylethylamine yielding the polycationic glycoconjugate polymer. Monomeric and polymeric 3,6-branched .alpha.-D-mannosides were subjected to a lectin binding assay (Con A) to evaluate their related binding activity. The **fluorescence** assay revealed that the lectin binding is increased in the order pNP mannoside < 3,6-branched mannoside monomer < 3,6-branched mannose polymer.
IT **207386-47-8**
RL: BPR (Biological process); PRP (Properties); BIOL (Biological study); PROC (Process)

(prepn. and protein binding activity of cationic polyacrylate-bound **glycoconjugate** carrying branched mannosyl trisaccharide cluster)

RN 207386-47-8 HCAPLUS

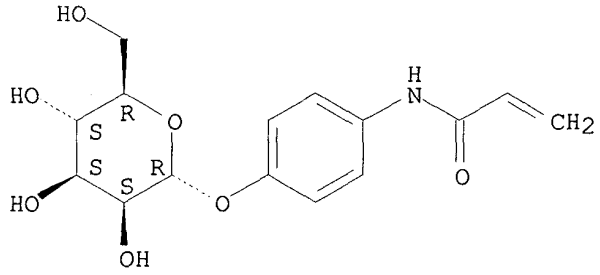
CN 2-Propenamide, N-[4-(.alpha.-D-mannopyranosyloxy)phenyl]-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 187147-07-5

CMF C15 H19 N O7

Absolute stereochemistry. Rotation (+).



IT **273930-94-2P**

RL: BPR (Biological process); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)

(prepn. and protein binding activity of cationic polyacrylate-bound **glycoconjugate** carrying branched mannosyl trisaccharide cluster)

RN 273930-94-2 HCAPLUS

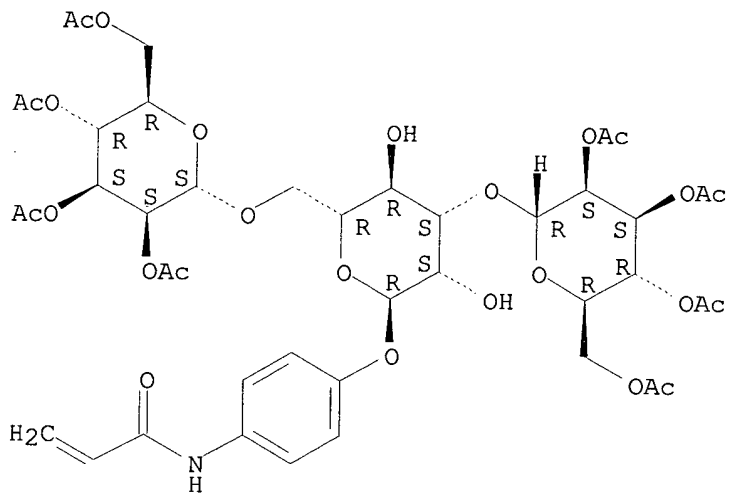
CN 2-Propenamide, N-[2-(dimethylamino)ethyl]-, polymer with N-[4-([O-2,3,4,6-tetra-O-acetyl-.alpha.-D-mannopyranosyl-(1.fwdarw.3)-O-[2,3,4,6-tetra-O-acetyl-.alpha.-D-mannopyranosyl-(1.fwdarw.6)]-.alpha.-D-mannopyranosyl]oxy)phenyl]-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 273930-93-1

CMF C43 H55 N O25

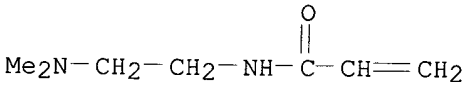
Absolute stereochemistry.



only trisacch - not poly

CM 2

CRN 925-76-8
CMF C7 H14 N2 O

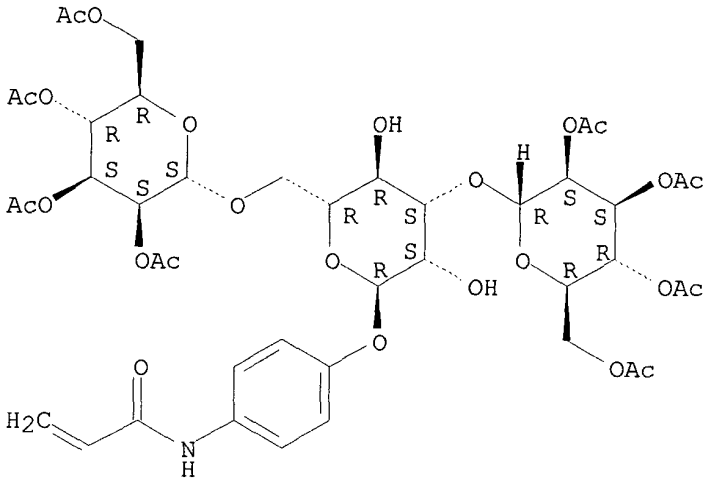


IT **273930-95-3P**
RL: BPR (Biological process); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)
(prepn. and protein binding activity of cationic polyacrylate-bound **glycoconjugate** carrying branched mannosyl trisaccharide cluster)
RN 273930-95-3 HCAPLUS
CN 2-Propenamide, N-[4-([O-2,3,4,6-tetra-O-acetyl-.alpha.-D-mannopyranosyl-(1.fwdarw.3)-O-[2,3,4,6-tetra-O-acetyl-.alpha.-D-mannopyranosyl-(1.fwdarw.6)]-.alpha.-D-mannopyranosyl]oxy)phenyl]-, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

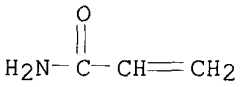
CRN 273930-93-1
CMF C43 H55 N O25

Absolute stereochemistry.



CM 2

CRN 79-06-1
CMF C3 H5 N O



RE.CNT 28
RE
(1) Barresi, F; Can J Chem 1994, V72, P1447 HCAPLUS
(2) Bonfils, E; Bioconjugate Chem 1992, V3, P277 HCAPLUS
(3) Choi, S; J Am Chem Soc 1997, V119, P4103 HCAPLUS
(4) Desnick, R; Acta Paediatrica 1998, V40, P191 HCAPLUS
(5) Ferkol, T; Proc Natl Acad Sci 1996, V93, P101 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L66 ANSWER 12 OF 43 HCAPLUS COPYRIGHT 2001 ACS
AN 2000:139915 HCAPLUS
DN 133:79142
TI **DNA delivery** systems based on complexes of **DNA** with synthetic polycations and their copolymers
AU Oupicky, D.; Konak, C.; Ulbrich, K.; Wolfert, M. A.; Seymour, L. W.
CS Institute of Macromolecular Chemistry, Academy of Sciences of the Czech Republic, Prague, 162 06, Czech Rep.
SO J. Controlled Release (2000), 65(1-2), 149-171
CODEN: JCREEC; ISSN: 0168-3659
PB Elsevier Science Ireland Ltd.
DT Journal
LA English
AB Block and graft copolymers of N-(2-hydroxypropyl)methacrylamide (HPMA)

with 2-(trimethylammonio)ethyl methacrylate were synthesized and used for prepn. of polyelectrolyte complexes with calf thymus **DNA** intended for targeted **delivery** of genes in vivo. In this study the effects of the speed of component mixing, total concn. of polymers, ionic strength of solvents, copolymer structure and content of HPMA in the copolymers on parameters of the polyelectrolyte complexes was investigated. Static and dynamic light scattering methods were used as a main tool for characterizing these complexes. The presence of HPMA units in the polycation had no significant effect on its ability to form complexes with **DNA**, but did affect mol. parameters and aggregation (pptn.) of the complexes. The size of the complexes increases whereas their mol. wt. decreases with increasing content of HPMA units. The d. of the complexes decreases with increasing HPMA content independently of the copolymer structure. In order to prep. stable **DNA** complexes contg. single **DNA** mol., the following rules should be obsd.: (1) copolymers should have a content of HPMA units higher than 40%; (2) the **DNA** concns. in solns. should be kept below 4.cntdot.10-5 g/mL and (3) both components should be mixed together in deionized water. The stability of the complexes against pptn. in 0.15 M NaCl and the resistance of the complexed **DNA** to the action of nucleases was also studied. Whereas **DNA** complexes of all copolymers showed very good nuclease stability, the presence of a sufficiently high content of HPMA is necessary for their good stability in 0.15 M NaCl. The investigation of the stability and the interaction of **DNA** complexes in aq. solns. of serum albumin and dil. human blood serum revealed adsorption of biomacromols. on **DNA** complexes accompanied by significant changes in the .zeta.-potential which finally resulted in formation of a "protein layer" and in undesirable pptn. of **DNA** complexes. In in vitro transfection expts., the transfection efficiency of **DNA** complexes with copolymers was always higher than that of the cationic homopolymer slightly increasing with increasing content of HPMA in the copolymers but being about 10-100-times lower than the complexes **DNA**-poly(l-lysine. In the cytoplasmic injections, it was obsd. that **DNA** complexes produced greater gene expression than a direct microinjection of free **DNA**. The block copolymer complexes were also found to be more efficient than the corresponding simple polycation complexes. In the nuclear microinjection, precisely the opposite behavior was obsd.

IT **278612-16-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(**DNA delivery** systems based on complexes of **DNA** with synthetic polycations and their copolymers)

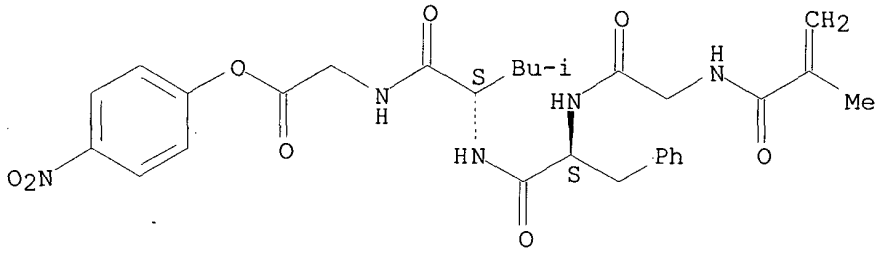
RN 278612-16-1 HCAPLUS

CN 2-5-Tachykinin-related peptide Ib (Cancer borealis), N-(2-methyl-1-oxo-2-propenyl)-, 4-nitrophenyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 100424-71-3
CMF C29 H35 N5 O8
CDES 5:L,L

Absolute stereochemistry.



RE.CNT 25
RE
(2) Burchard, W; Adv Polym Sci 1983, V48, P1 HCAPLUS
(4) Dash, P; J Control Release 1997, V48, P269 HCAPLUS
(6) Harada, A; Macromolecules 1995, V28, P5294 HCAPLUS
(7) Kabanov, A; Bioconj Chem 1995, V6, P639 HCAPLUS
(8) Kabanov, A; Bioconj Chem 1995, V6, P7 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L66 ANSWER 13 OF 43 HCAPLUS COPYRIGHT 2001 ACS
AN 2000:129298 HCAPLUS
DN 132:330437
TI Decreased binding to proteins and cells of polymeric gene **delivery** vectors surface modified with a multivalent hydrophilic polymer and retargeting through attachment of transferrin
AU Dash, Philip R.; Read, Martin L.; Fisher, Kerry D.; Howard, Kenneth A.; Wolfert, Margreet; Oupicky, David; Subr, Vladimir; Strohalm, Jiri; Ulbrich, Karel; Seymour, Leonard W.
CS Cancer Research Campaign Institute for Cancer Studies, University of Birmingham, Birmingham, B15 2TA, UK
SO J. Biol. Chem. (2000), 275(6), 3793-3802
CODEN: JBCHA3; ISSN: 0021-9258
PB American Society for Biochemistry and Molecular Biology
DT Journal
LA English
AB Binding of serum proteins to polyelectrolyte gene **delivery** complexes is thought to be an important factor limiting bloodstream circulation and restricting access to target tissues. Protein binding can also inhibit transfection activity in vitro. In this study a multivalent reactive hydrophilic polymer has been used to inhibit protein binding. This polymer is based on poly-[N-(2-hydroxypropyl)methacrylamide] (pHPMA) bearing pendent oligopeptide (Gly-Phe-Leu-Gly) side chains terminated in reactive 4-nitrophenoxy groups (8.6 mol%). The polymer reacts with the primary amino groups of poly(L-lysine) (pLL) and produces a hydrophilic coating on the surface of pLL.cntdot.**DNA** complexes (as measured by **fluorescamine**). The resulting pHPMA-coated complexes show a decreased surface charge (from +14 mV for pLL.cntdot.**DNA** complexes to -25 mV for pHPMA-modified complexes) as measured by .zeta. potential anal. The pHPMA-coated complexes also show a slightly increased av. diam. (approx. 90 nm compared with 60 nm for pLL.cntdot.**DNA** complexes) as viewed by at. force and transmission electron microscopy and

around 100 nm as viewed by photon correlation spectroscopy. They are completely resistant to protein interaction, as detd. by turbidometry and SDS-polyacrylamide gel electrophoresis anal. of complexes isolated from plasma, and show significantly decreased nonspecific uptake into cells in vitro. Spare reactive ester groups can be used to conjugate targeting ligands (e.g. transferrin) on to the surface of the complex to provide a means of tissue-specific targeting and transfection. The properties of these complexes therefore make them promising candidates for targeted gene **delivery**, both in vitro and potentially in vivo.

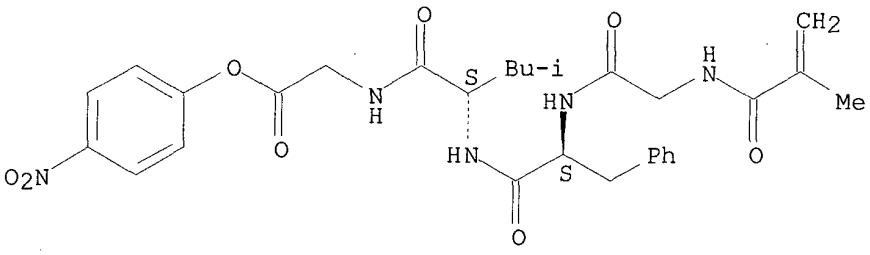
IT **100424-72-4P**
RL: BUU (Biological use, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(pHPMA-ONp; decreased binding to proteins and cells of polymeric gene **delivery** vectors surface modified with multivalent hydrophilic polymer and retargeting through attachment of transferrin)

RN 100424-72-4 HCAPLUS
CN Glycine, N-(2-methyl-1-oxo-2-propenyl)glycyl-L-phenylalanyl-L-leucyl-, 4-nitrophenyl ester, polymer with N-(2-hydroxypropyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

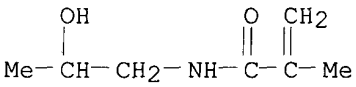
CRN 100424-71-3
CMF C29 H35 N5 O8
CDES 5:L,L

Absolute stereochemistry.



CM 2

CRN 21442-01-3
CMF C7 H13 N O2



RE.CNT 26
RE
(1) Allen, T; Drugs 1998, V56, P747 HCAPLUS
(2) Anderson, W; Nature 1998, V392, P25 HCAPLUS

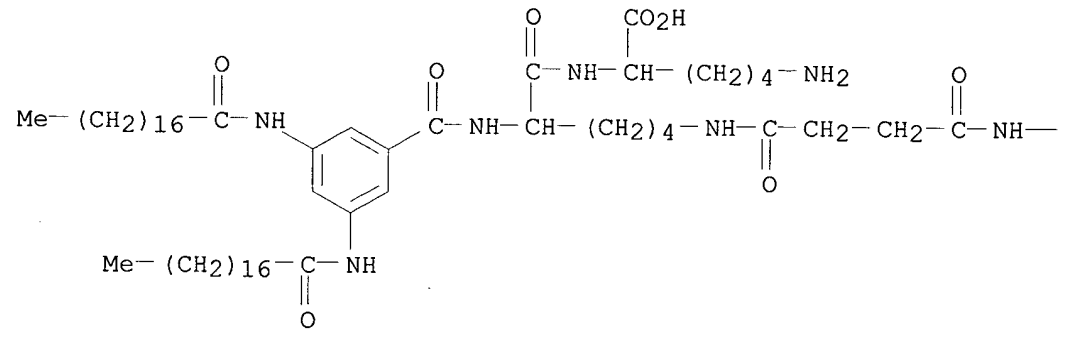
(3) Bonadio, J; Adv Drug Delivery Rev 1998, V33, P53 HCAPLUS
(4) Chao, J; Biodrugs 1999, V11, P43 HCAPLUS
(5) Dash, P; Gene Ther 1999, V6, P643 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L66 ANSWER 14 OF 43 HCAPLUS COPYRIGHT 2001 ACS
AN 1999:708651 HCAPLUS
DN 131:319900
TI **Diagnostic**/therapeutic agents comprising membrane-forming amphiphilic lipopeptide-stabilized gas microbubbles
IN Cuthbertson, Alan; Solbakken, Magne; Wolfe, Henry Raphael
PA Marsden, John Christopher, UK; Nycomed Imaging A/S
SO PCT Int. Appl., 59 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

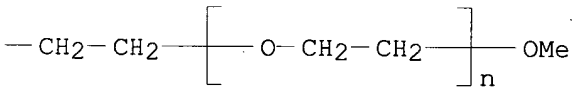
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9955383	A2	19991104	WO 1999-GB1247	19990422
	WO 9955383	A3	20000706		
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	EP 1073475	A2	20010207	EP 1999-918154	19990422
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	AU 9936187	A1	19991116	AU 1999-36187	19990423
	NO 2000005382	A	20001218	NO 2000-5382	20001026
PRAI	GB 1998-9084	A	19980428		
	WO 1999-GB1247	W	19990422		

AB Novel membrane-forming amphiphilic lipopeptides comprise one or more peptide moieties contg. 2-50 aminoacyl residues and one or more hydrocarbon chains contg. 5-50 carbon atoms. Such lipopeptides may be used in the formation of stabilized gas microbubble dispersions suitable for use as **diagnostic** and/or therapeutic agents, for example as ultrasound contrast agents. Perfluorobutane-contg. microbubbles were prepd. that used N-[3-(2-aminoethanamido)-5-[2-(n-hexadecyl)octadecanamido]benzoyl]glycine (prepn. given) as the membrane-forming agent.
IT **248602-54-2P**
RL: ARG (Analytical reagent use); SPN (Synthetic preparation); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(**diagnostic**/therapeutic agents comprising membrane-forming amphiphilic lipopeptide-stabilized gas microbubbles)
RN 248602-54-2 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-methoxy-.omega.-hydroxy-, ether with N2-[3,5-bis[(1-oxooctadecyl)amino]benzoyl]-N6-[4-[(2-hydroxyethyl)amino]-1,4-dioxobutyl]-L-lysyl-L-lysine (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L66 ANSWER 15 OF 43 HCAPLUS COPYRIGHT 2001 ACS
AN 1999:581389 HCAPLUS
DN 132:12460
TI Synthesis of an artificial glycoconjugate polymer carrying Pk-antigenic trisaccharide and its potent neutralization activity against Shiga-like toxin
AU Dohi, H.; Nishida, Y.; Mizuno, M.; Shinkai, M.; Kobayashi, T.; Takeda, T.;
Uzawa, H.; Kobayashi, K.
CS Graduate School of Engineering, Department of Molecular Design and Engineering, Nagoya University, Nagoya, 464-8603, Japan
SO Bioorg. Med. Chem. (1999), 7(9), 2053-2062
CODEN: BMECEP; ISSN: 0968-0896
PB Elsevier Science Ltd.
DT Journal
LA English
OS CASREACT 132:12460
AB **Fluorescence**-labeled glycoconjugate polymers carrying carbohydrate segments of a globotriaosyl ceramide (Gb3) were synthesized and subjected to biol. assays using Escherichia coli O-157 strains and Shiga-like toxins (Stx-I and Stx-II). For the **fluorescence** labeling, a new polymerizable **fluorescent** monomer with a TBMB carbonyl chromophore (Ex. 325 nm, Em. 410 nm) was designed. A glycosyl monomer of the trisaccharide segment of Gb3 was prepd. from p-nitrophenyl .beta.-lactoside and copolymd. with acrylamide and the **fluorescent** monomer to prep. a **fluorescence**-labeled glycoconjugate copolymer carrying [.alpha.-D-galactopyranosyl-(1)-.beta.-D-galactopyranosyl]-(1

)-.beta.-D-glucopyranoside. The polymer showed potent neutralization activity against Stx-I and also binding activity onto E. coli O-157 strains.

IT **251365-54-5P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and activity of as an artificial **glycoconjugate** polymer carrying Pk-antigenic trisaccharide for use against Shiga-like toxins)

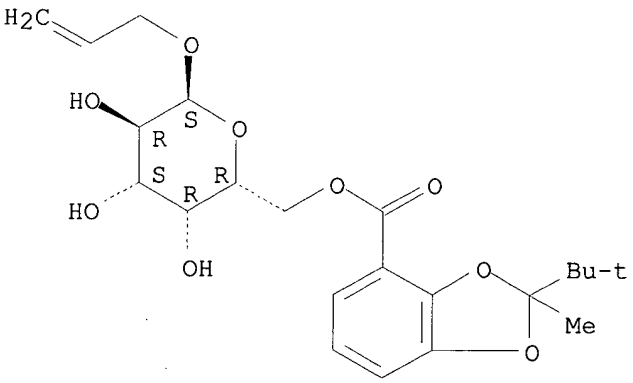
RN 251365-54-5 HCAPLUS

CN .alpha.-D-Galactopyranoside, 2-propenyl 6-O-[[2-(1,1-dimethylethyl)-2-methyl-1,3-benzodioxol-4-yl]carbonyl]-, polymer with N-[4-[(O-.alpha.-D-galactopyranosyl-(1.fwdarw.4)-O-.beta.-D-galactopyranosyl-(1.fwdarw.4)-.beta.-D-glucopyranosyl)oxy]phenyl]-2-propenamide and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 251365-50-1
CMF C22 H30 O9

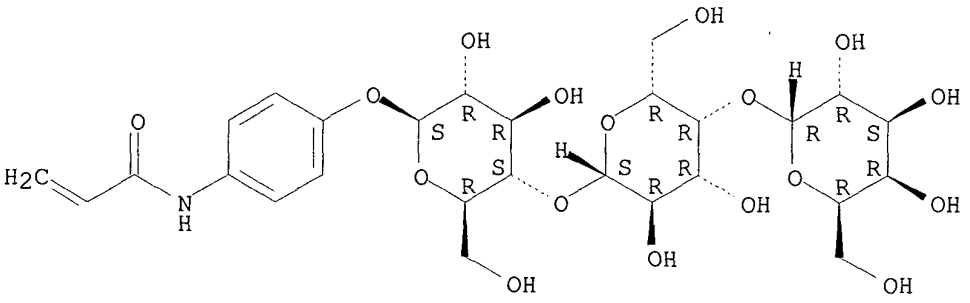
Absolute stereochemistry.



CM 2

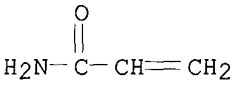
CRN 218617-35-7
CMF C27 H39 N O17

Absolute stereochemistry.



CM 3

CRN 79-06-1
CMF C3 H5 N O



RE.CNT 29
RE
(1) Arab, S; Glycoconjugate J 1996, V13, P159 HCAPLUS
(2) Bovin, N; Chem Soc Rev 1995, V24, P413 HCAPLUS
(3) Choi, S; J Am Chem Soc 1997, V119, P4103 HCAPLUS
(5) Glaudemans, C; Methods Carbohydr Chem 1980, V8, P145 HCAPLUS
(6) Gordon, E; Nature 1998, V392, P30 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

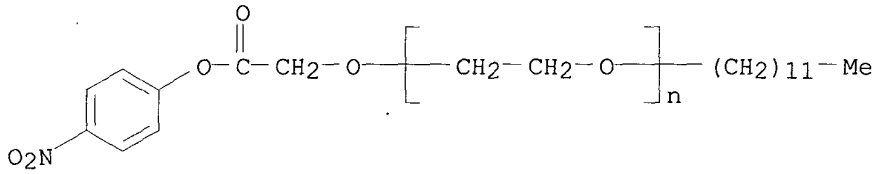
L66 ANSWER 16 OF 43 HCAPLUS COPYRIGHT 2001 ACS
AN 1999:286747 HCAPLUS
DN 131:106712
TI The transport of cytotoxic liposomes to malignant cells by means of carbohydrate determinants
AU Vodovozova, E. L.; Khaidukov, S. V.; Gaenko, G. P.; Bondarchuk, T. N.; Mikhalev, I. I.; Grechishnikova, I. V.; Molotkovsky, Jul. G.
CS Shemyakin-Ovchinnikov Institute of Bioorganic Chemistry, Russian Academy of Sciences, Moscow, 117871, Russia
SO Bioorg. Khim. (1998), 24(10), 760-767
CODEN: BIKHD7; ISSN: 0132-3423
PB MAIK Nauka
DT Journal
LA Russian
AB A method of the synthesis of lipophilic glycoconjugates (vectors) on the basis of polyethyleneglycol-contg. detergent was proposed. It has been shown by flow cytofluorometry that **fluorescent** labeled liposomes equipped with .beta.-galactosyl conjugate are bound human leukosis HL-60 cells more effectively than liposomes embedded with the .beta.-glucosyl conjugate or vector-free liposomes. A new lipid deriv. of antitumor **drug** rubomycin (daunorubicin), N-(rac-1,2-dioleoylglycero-3-

oxalyl)rubomycin (RubDG) has been synthesized. Liposomes loaded with RubDG and equipped with galactosyl vector showed higher cytotoxic activity in vitro against HL-60 cells than analogous unvectored liposomes or liposomes bearing glucosyl conjugate.

IT **230622-90-9P**
RL: BPR (Biological process); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)
(transport of cytotoxic liposomes to malignant cells by means of carbohydrate determinants)

RN 230622-90-9 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-dodecyl-.omega.-[2-(4-nitrophenoxy)-2-oxoethoxy]- (9CI) (CA INDEX NAME)



L66 ANSWER 17 OF 43 HCAPLUS COPYRIGHT 2001 ACS

AN 1999:251457 HCAPLUS

DN 131:49316

TI Degradation and aggregation of human calcitonin in vitro

AU Lu, Richard H.; Kopeckova, Pavla; Kopecek, Jindrich

CS Departments of Pharmaceutics and Pharmaceutical Chemistry/CCCD, and of Bioengineering, University of Utah, Salt Lake City, UT, 84112, USA

SO Pharm. Res. (1999), 16(3), 359-367
CODEN: PHREEB; ISSN: 0724-8741

PB Kluwer Academic/Plenum Publishers

DT Journal

LA English

AB To investigate the degrdn. of human calcitonin (hCT) by enzymes or mucosa from different gastrointestinal (GI) compartments and evaluate the stabilization effect of a synthetic ionizable copolymer on the stability of hCT in an aq. soln. These data are a prerequisite for the development of a hydrogel based colon-specific hCT **delivery** system. Luminal and brush border membrane (BBM) enzymes from the colon and small intestine (SI) of the rabbit were isolated and their enzymic activity toward hCT in vitro was evaluated. Human fecalase was used to mimic the luminal enzymic activity in the human colon and its degrdn. ability was assessed. Excised intact rabbit intestinal tissues from both the colon and the SI were used to study the degrdn. patterns of hCT by intact mucosa. Detection of intact human calcitonin was performed using gradient elution, reverse-phase HPLC. The structure of the hCT fragments was detd. by matrix assisted laser desorption/ionization time-of-flight mass spectrometry (MALDI-TOF MS) anal. UV/VIS and **fluorescence**

spectroscopy methods were used to evaluate the influence of a copolymer, possessing the same structure as the primary chains in hydrogels degradable in the colon, on the fibrillation process of hCT. In vitro results showed that isolated luminal enzymes and BBM enzymes from the SI were more potent in degrading intact hCT, as expected. Moreover, BBM enzymes were far more abundant in the SI than in the colon. Compared with rabbit colonic luminal enzymes, the degrdn. potency of human fecalase was further abated. Intact mucosal studies revealed extensive degrdn. by the SI mucosa but not by the colonic mucosa. The primary structures of the peptide fragments were identified by MALDI-TOF MS anal. Fibrillation studies of hCT indicated that acrylic acid-contg. polymeric materials were able to decrease the aggregation of hCT in aq. solns. Reduced proteolytic activity suggests that the colon is an advantageous site for peptide **delivery**. The structures of hCT degrdn. products were identified and the participation of particular enzymes in the degrdn. process was suggested. In addn., it was detd. that an acrylic acid-contg. copolymer improved the phys. stability of hCT in aq. soln.

IT **227453-71-6DP**, aminolysis products
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(degrdn. and aggregation of human calcitonin in vitro)

RN 227453-71-6 HCAPLUS

CN Glycine, N-(2-methyl-1-oxo-2-propenyl)glycyl-, 4-nitrophenyl ester, polymer with N-(1,1-dimethylethyl)-2-propenamide and N,N-dimethyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 57950-79-5
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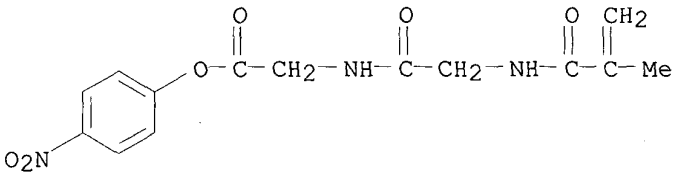
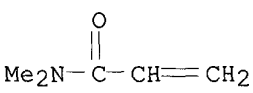


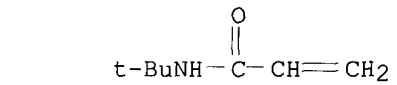
CM 2

CRN 2680-03-7
CMF C5 H9 N O



CM 3

CRN 107-58-4
CMF C7 H13 N O



RE.CNT 30
RE
(1) Akala, E; Biomaterials 1998, V19, P1037 HCAPLUS
(4) Bai, J; Pharm Res 1992, V9, P969 HCAPLUS
(5) Baudys, M; J Contr Rel 1996, V39, P145 HCAPLUS
(6) Bernkop-Schnurch, A; J Contr Rel 1998, V52, P1 HCAPLUS
(7) Brondsted, H; Biomaterials 1991, V12, P584 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L66 ANSWER 18 OF 43 HCAPLUS COPYRIGHT 2001 ACS
AN 1999:20847 HCAPLUS
DN 130:193938
TI Carbohydrate-based probes for detection of cellular lectins
AU Galanina, Oxana E.; Tuzikov, Alexander B.; Rapoport, Evgenia; Le Pendu, Jacques; Bovin, Nicolai V.
CS Shemyakin Institute of Bioorganic Chemistry, Russian Academy of Sciences, Moscow, 117871, Russia
SO Anal. Biochem. (1998), 265(2), 282-289
CODEN: ANBCA2; ISSN: 0003-2697
PB Academic Press
DT Journal
LA English
AB Carbohydrate (spacered saccharide residue, Glyc) probes with various tags were synthesized as anal. tools for study of cellular lectins, i.e., Glyc-polyacrylamide-3H, Glyc-PAA-biotin, Glyc-PAA-**fluorescein** (flu), and Glyc-PAA-digoxigenin, where PAA is a sol. polyacrylamide carrier of .apprxeq.30 kDa. Binding of all types of probes, where Glyc is the sialyl Lewis X (SiaLeX) tetrasaccharide or a blank saccharide, was assessed using Chinese hamster ovary (CHO) cells either transfected with the E-selectin cDNA or mock-transfected. High binding of SiaLeX-PAA-3H to E-selectin-transfected cells and absence of binding to control cells (both native and permeabilized) allowed the conclusion that the polyacrylamide carrier and the spacer arm do not contribute significantly to the binding. The biotinylated probe showed a high level of nonspecific binding in cell enzyme-linked assays. A similarly built digoxigenin-labeled probe was significantly better. In flow cytometry assays, the **fluorescein** probe demonstrated a specific binding to E-selectin-transfected cells of a similar level to that given by an anti-E-selectin antibody. In addn., it could be inhibited by the anti-E-selectin antibody, further demonstrating

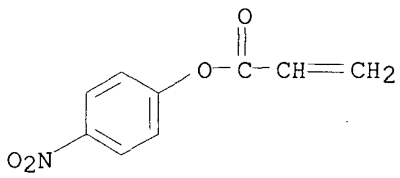
specificity. Tumors were obtained from nude mice by injection of CHO E-selectin or mock-transfected cells. The **fluorescent** SiaLeX-PAA-flu probe could bind to tumor sections from E-selectin-pos. CHO cells, but not from control CHO cells. These probes can thus be used to reveal specifically complex carbohydrate-binding sites on cells either in culture or on tissue sections. (c) 1998 Academic Press.

IT **67391-52-0D**, Poly(4-nitrophenylacrylate), **conjugate** with sialyl Lewis X and biotin/digoxigenin
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(probe; carbohydrate-based probes for detection of cellular lectins)

RN 67391-52-0 HCAPLUS
CN 2-Propenoic acid, 4-nitrophenyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 2123-85-5
CMF C9 H7 N O4



RE.CNT 16
RE
(1) Adam, A; J Pharm Biomed Anal 1996, V15, P13 HCAPLUS
(2) Bovin, N; Glycoconj J 1993, V10, P142 HCAPLUS
(4) Bovin, N; Glycoconj J 1998, V15, P431 HCAPLUS
(5) Bovin, N; Rev Chem Soc 1995, V24, P413 HCAPLUS
(6) Carlos, T; Blood 1994, V84, P2068 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L66 ANSWER 19 OF 43 HCAPLUS COPYRIGHT 2001 ACS
AN 1998:761809 HCAPLUS
DN 130:17218
TI Targeted **delivery** to T lymphocytes
IN Prakash, Ramesh K.; Kumar, Vijay
PA Theratech, Inc., USA
SO PCT Int. Appl., 46 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9851336	A1	19981119	WO 1998-US9057	19980504
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,				

NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
CM, GA, GN, ML, MR, NE, SN, TD, TG

	AU 9872826	A1	19981208	AU 1998-72826	19980504
	ZA 9803996	A	19981120	ZA 1998-3996	19980512
PRAI	US 1997-857009		19970515		
	WO 1998-US9057		19980504		

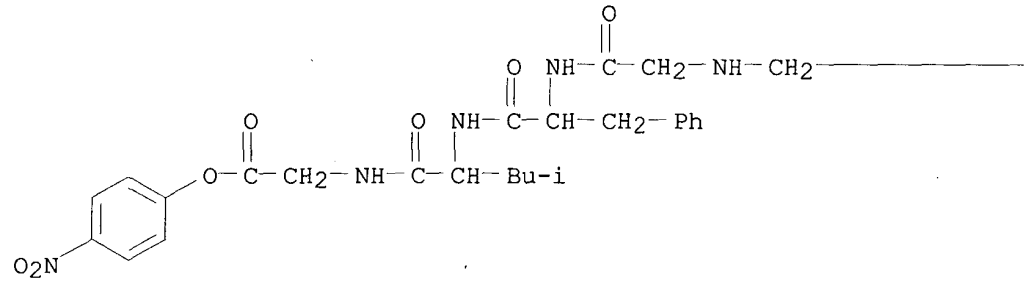
AB A compn. for intracellular **delivery** of a chem. agent into a T cell comprises a receptor-binding and endocytosis-inducing ligand and a chem. agent coupled to a water sol. polymer. The ligand binds to a receptor on T lymphocytes and elicits endocytosis of the compn. The compn. also includes a spacer for coupling the chem. agent and the ligand to the polymer. Chem. agents can include cytotoxins, transforming **nucleic** acids, gene regulators, labels, antigens, **drugs**, and the like. A preferred water sol. polymer is polyethyleneglycol and activated derivs. thereof. The compn. can further comprise a carrier such as a water sol. polymer, liposome, or particulate. Methods of using these compns. for **delivering** a chem. agent in vivo or in vitro are also disclosed.

IT **216145-69-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(targeted **delivery** to T lymphocytes)

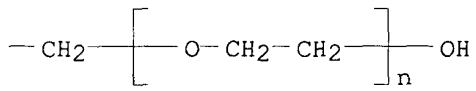
RN 216145-69-6 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, monoether with N-(2-hydroxyethyl)glycyl-L-phenylalanyl-L-leucylglycine 4-nitrophenyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



RE.CNT 4

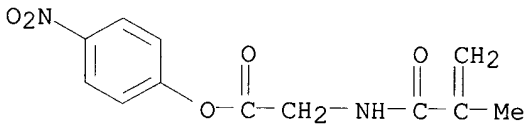
RE
(1) Harris; US 5446090 A 1995 HCAPLUS
(2) Nemerow; Cell 1989, V56, P369 HCAPLUS
(3) Rihova; Biomaterials 1989, V10, P335 HCAPLUS
(4) Rihova, B; J of Controlled Release 1985, V2, P289 HCAPLUS

L66 ANSWER 20 OF 43 HCAPLUS COPYRIGHT 2001 ACS
AN 1998:417740 HCAPLUS
DN 129:127064
TI Influence of pH on aggregation and photoproperties of N-(2-hydroxypropyl)methacrylamide copolymer-meso-chlorin e6 conjugates
AU Shiah, Jane-Guo; Konak, Cestmir; Spikes, John D.; Kopecek, Jindrich
CS Deps. Pharmaceutics Pharmaceutical Chem./CCCD, Univ. Utah, Salt Lake City, UT, USA
SO Drug Delivery (1998), 5(2), 119-126
CODEN: DDELEB; ISSN: 1071-7544
PB Taylor & Francis
DT Journal
LA English
AB The influence of pH on the aggregation and photoproperties of N-(2-hydroxypropyl)methacrylamide (HPMA)-methacryloylglycine copolymers contg. meso-chlorin e6 monoethylenediamine (Mce6) attached to the copolymer via either nonbiodegradable G or biodegradable GFLG side chains was studied. Dynamic light scattering, UV/visible and **fluorescence** spectroscopy, time-resolved **fluorescence** spectroscopy, and **fluorescence** quenching techniques were used. The photosensitizing efficiencies of these conjugates (with potential use in photodynamic therapy) were also detd. The dynamic light-scattering data indicate that the intermol. aggregation of Mce6 species within the copolymer conjugates is not significant and is not affected by pH or loading of Mce6 to copolymer at 5 .times. 10-4 g/mL of copolymer conjugate concn. However, intramol. aggregation of the Mce6 species within the copolymer conjugates does occur in aq. buffers, as demonstrated by absorption and **fluorescence** measurements in ethanol-buffer mixts. The **fluorescence** lifetime of excited Mce6 was influenced by aggregation, mainly attributed to the pH and copolymer side-chain hydrophobicity. The Stern-Volmer collisional quenching const., Ksv, of iodide anion with Mce6 species was found to be a function of pH, reflecting both the electrostatic repulsion between neg. charged Mce6 species and iodide anions and the intramol. aggregation of Mce6 moieties. The extent of aggregation was found to be a function of solvent pH, loading of Mce6, and side-chain hydrophobicity. The photosensitizing efficiency of the copolymer-bound Mce6, as detd. through the photooxidn. of furfuryl alc., was dominated by Mce6 loading to copolymer and side-chain hydrophobicity, but was only slightly pH dependent. Evidently the Mce6 aggregation only weakly influenced the charge transfer in the process of oxygen generation.
IT **62238-85-1D**, reaction products with meso-chlorin e6 monoethylenediamine deriv. **100424-72-4D**, reaction products with meso-chlorin e6 monoethylenediamine deriv.
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES
(Uses)
(influence of pH on aggregation and photoproperties of)

RN 62238-85-1 HCAPLUS
CN Glycine, N-(2-methyl-1-oxo-2-propenyl)-, 4-nitrophenyl ester, polymer with
N-(2-hydroxypropyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

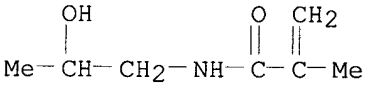
CM 1

CRN 57982-58-8
CMF C12 H12 N2 O5



CM 2

CRN 21442-01-3
CMF C7 H13 N O2

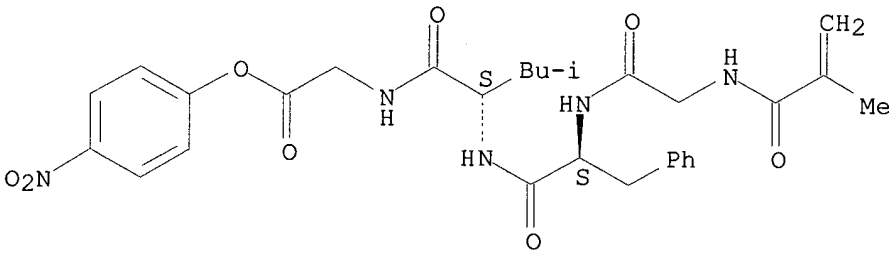


RN 100424-72-4 HCAPLUS
CN Glycine, N-(2-methyl-1-oxo-2-propenyl)glycyl-L-phenylalanyl-L-leucyl-, 4-nitrophenyl ester, polymer with N-(2-hydroxypropyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

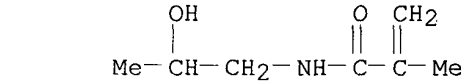
CRN 100424-71-3
CMF C29 H35 N5 O8
CDES 5:L,L

Absolute stereochemistry.



CM 2

CRN 21442-01-3
CMF C7 H13 N O2



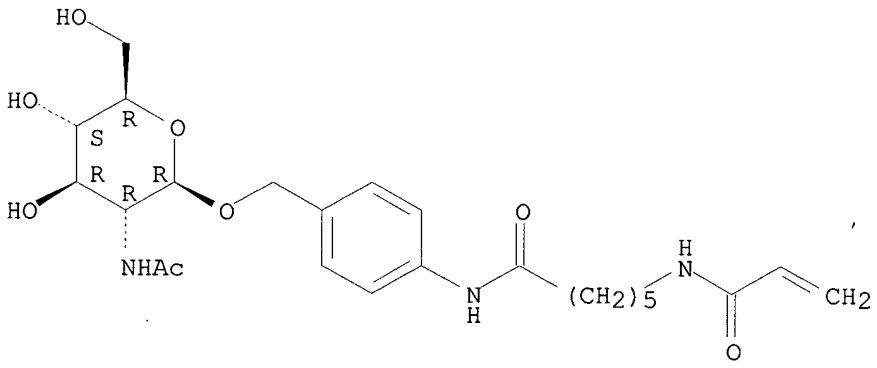
L66 ANSWER 21 OF 43 HCAPLUS COPYRIGHT 2001 ACS
AN 1998:378603 HCAPLUS
DN 129:136400
TI High performance polymer supports for enzyme-assisted synthesis of glycoconjugates
AU Yamada, Kuriko; Fujita, Eriko; Nishimura, Shin-Ichiro
CS Laboratory for Bio-Macromolecular Chemistry, Division of Biological Sciences, Graduate School of Science, Hokkaido University, Sapporo, 060, Japan
SO Carbohydr. Res. (1998), Volume Date 1997, 305(3-4), 443-461
CODEN: CRBRAT; ISSN: 0008-6215
PB Elsevier Science Ltd.
DT Journal
LA English
AB Efficient and practical methodol. for the construction of carbohydrates, including oligosaccharide derivs. and sphingoglycolipids, was established on the basis of a water-sol. polymer supports having unique linkers that can be cleaved by specific conditions. Novel glyco-monomers for the construction of polymer supports were synthesized and copolymd. with acrylamide to give three types of water-sol. glyco-polymers having primer sugars through the specific linkers contg. (i) p-substituted benzyl group, (ii) L-phenylalanine residue, and (iii) ceramide-mimetic L-serine deriv., resp. These glycopolymers were employed for sugar elongation reactions with glycosyl transferases such as GlcNAc .beta.1,4-galactosyl transferase, .beta.Gall .fwdarw. 3/4GlcNAc .alpha.-2,6-sialyl transferase, and .beta.Gall .fwdarw. 3/4GlcNAc .alpha.-2,3-sialyl transferase in the presence of each sugar **nucleotide** as glycosyl donor to afford polymers having N-acetyllactosamine, sialyl .alpha.-(2 .fwdarw. 6) N-acetyllactosamine, and sialyl .alpha.-(2 .fwdarw. 3) lactose residues in excellent yield. Subsequent hydrogenolysis, hydrolysis with .alpha.-chymotrypsin, or transglycosylation to ceramide with ceramide glycanase proceeds smoothly to give N-acetyllactosamine, a versatile sialyl .alpha.-(2 .fwdarw. 6) N-acetyllactosamine deriv. having a terminal amino group, and ganglioside GM3 in high yield.
IT **158979-52-3DP**, galactosylated
RL: BPN (Biosynthetic preparation); RCT (Reactant); BIOL (Biological study); PREP (Preparation)
(high performance polymer supports for enzyme-assisted synthesis of **glycoconjugates**)
RN 158979-52-3 HCAPLUS
CN Hexanamide, N-[4-[[[2-(acetylamino)-2-deoxy-.beta.-D-

glucopyranosyl]oxy]methyl]phenyl]-6-[(1-oxo-2-propenyl)amino]-, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

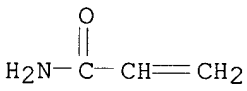
CRN 158979-50-1
CMF C24 H35 N3 O8

Absolute stereochemistry. Rotation (-).



CM 2

CRN 79-06-1
CMF C3 H5 N O

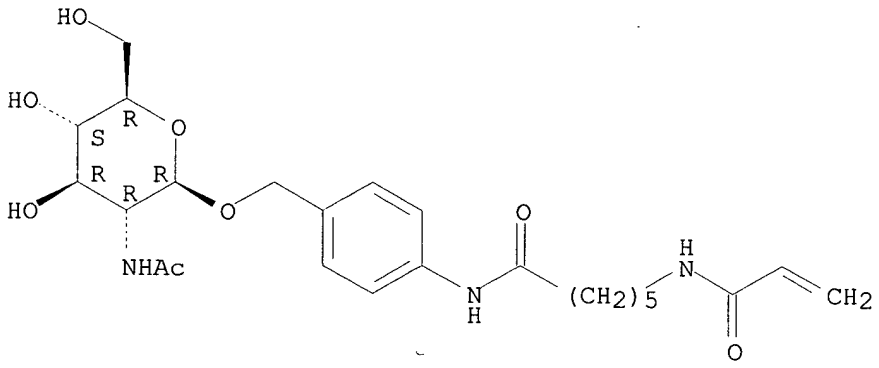


IT **158979-52-3P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(high performance polymer supports for enzyme-assisted synthesis of **glycoconjugates**)
RN 158979-52-3 HCAPLUS
CN Hexanamide, N-[4-[[[2-(acetylamino)-2-deoxy-.beta.-D-glucopyranosyl]oxy]methyl]phenyl]-6-[(1-oxo-2-propenyl)amino]-, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

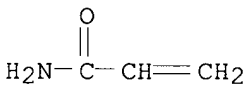
CRN 158979-50-1
CMF C24 H35 N3 O8

Absolute stereochemistry. Rotation (-).



CM 2

CRN 79-06-1
CMF C3 H5 N O

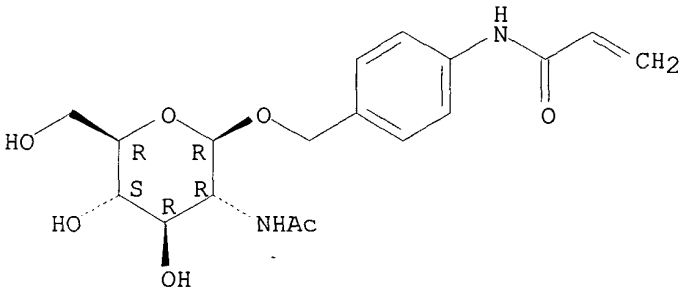


IT **158979-51-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(high performance polymer supports for enzyme-assisted synthesis of **glycoconjugates**)
RN 158979-51-2 HCAPLUS
CN 2-Propenamide, N-[4-[[[2-(acetylamino)-2-deoxy-.beta.-D-glucopyranosyl]oxy]methyl]phenyl]-, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

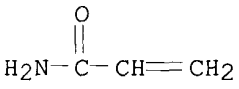
CRN 158979-49-8
CMF C18 H24 N2 O7
CDES 5:B-D-GLUCO

Absolute stereochemistry.



CM 2

CRN 79-06-1
CMF C3 H5 N O



L66 ANSWER 22 OF 43 HCAPLUS COPYRIGHT 2001 ACS
AN 1998:323163 HCAPLUS
DN 128:326554
TI Carrier vehicles for **delivery** of **nucleic** acid material to target cells in biological systems
IN Schacht, Etienne Honore; Seymour, Leonard Charles William; Ulbrich, Karel
PA Schacht, Etienne Honore, Belg.; Seymour, Leonard Charles William; Ulbrich, Karel
SO PCT Int. Appl., 72 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9819710	A2	19980514	WO 1997-GB2965	19971106
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9748739	A1	19980529	AU 1997-48739	19971106
EP 941123	A2	19990915	EP 1997-911324	19971106
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				

PRAI GB 1996-23051 19961106
WO 1997-GB2965 19971106

AB Synthetic polymer-based carrier vehicles for **delivery** of **nucleic** acid material to target cells in biol. systems are made by self-assembly of the **nucleic** acid with a cationic polymer material so as to condense the **nucleic** acid and form a polyelectrolyte complex. This complex is then treated with a reactive hydrophilic polymer material.which grafts to the complex forming a hydrophilic coating that stabilizes the complex and provides an outer protective steric shield. These carrier vehicles can be useful in gene therapy. Thus, an aq. soln. of poly(L-lysine) was added to a **DNA** soln. at a final cation to anion ratio 2 and allowed to stand for .gtoreq.30 min at room temp. to permit complete self-assembly of the complexes. Then, methacryloyl-terminated glycine-phenylalanine-leucine-glycine p-nitrophenyl ester copolymer with N-2-hydroxypropylmethacrylamide was grafted onto the poly(L-lysine)-**DNA** complex to provide an outer protective steric shield and to stabilize the complex. The max. concn. of **DNA** depended on the hydrophilicity of the structure of the cationic polymer. Typical particles were discrete and had diam. 30-50 nm. The coated complexes were relatively stable and easy to handle.

IT **206554-54-3**
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES
(Uses)
(cationic polymer-**nucleic** acid material self-assembly coated with hydrophilic polymer as carrier vehicle for **delivery** to target cells)

RN 206554-54-3 HCAPLUS

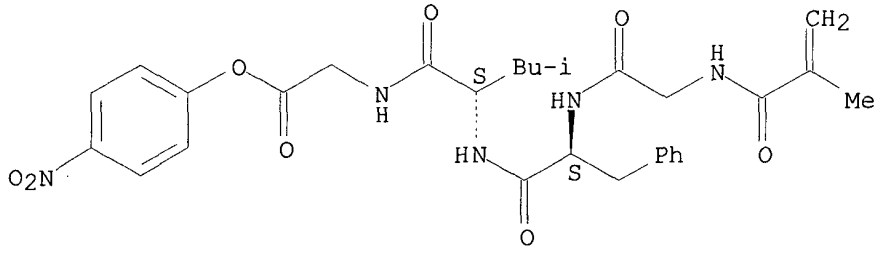
CN L-Lysine, polymer with N-(2-hydroxypropyl)-2-methyl-2-propenamide and N-(2-methyl-1-oxo-2-propenyl)glycyl-L-phenylalanyl-L-leucylglycine 4-nitrophenyl ester, graft (9CI) (CA INDEX NAME)

CM 1

CRN 100424-71-3
CMF C29 H35 N5 O8
CDES 5:L,L

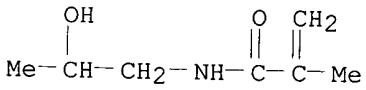
Looks like nitrophenyl is leaving group in synthesis.

Absolute stereochemistry.



CM 2

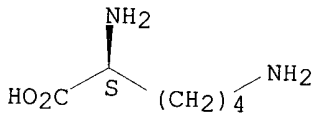
CRN 21442-01-3
CMF C7 H13 N O2



CM 3

CRN 56-87-1
CMF C6 H14 N2 O2
CDES 5:L

Absolute stereochemistry.

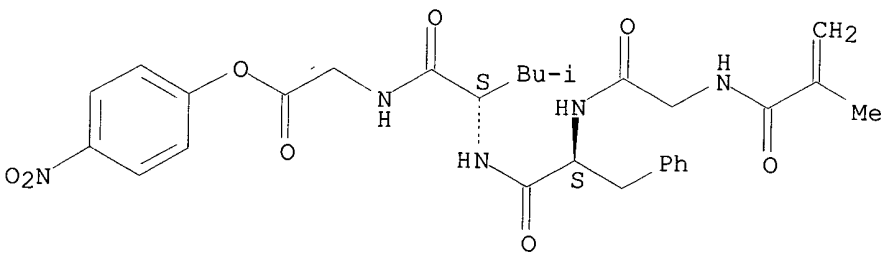


IT **100424-72-4P**
RL: IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(coating for self-assembly; cationic polymer-**nucleic** acid material self-assembly coated with hydrophilic polymer as carrier vehicle for **delivery** to target cells)
RN 100424-72-4 HCAPLUS
CN Glycine, N-(2-methyl-1-oxo-2-propenyl)glycyl-L-phenylalanyl-L-leucyl-, 4-nitrophenyl ester, polymer with N-(2-hydroxypropyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

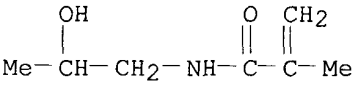
CRN 100424-71-3
CMF C29 H35 N5 O8
CDES 5:L,L

Absolute stereochemistry.



CM 2

CRN 21442-01-3
CMF C7 H13 N O2



L66 ANSWER 23 OF 43 HCAPLUS COPYRIGHT 2001 ACS
AN 1998:304262 HCAPLUS
DN 129:2225
TI Contrast agents
IN Klaveness, Jo; Naevestad, Anne; Cuthbertson, Alan
PA Nycomed Imaging A/S, Norway; Cockbain, Julian; Klaveness, Jo; Naevestad, Anne; Cuthbertson, Alan
SO PCT Int. Appl., 99 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 9

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9818496	A2	19980507	WO 1997-GB2956	19971028
	W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9747868	A1	19980522	AU 1997-47868	19971028
	EP 971747	A2	20000119	EP 1997-910516	19971028
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	US 6264914	B1	20010724	US 1999-300434	19990428
	US 2001016587	A1	20010823	US 2001-785177	20010220
PRAI	GB 1996-22364	A	19961028		
	GB 1996-22365	A	19961028		
	GB 1996-22366	A	19961028		
	GB 1996-22367	A	19961028		
	GB 1996-22368	A	19961028		
	GB 1996-22369	A	19961028		
	GB 1997-699	A	19970115		
	GB 1997-2195	A	19970204		
	GB 1997-6063	A	19970324		
	US 1997-58247	P	19970909		
	WO 1997-GB2956	W	19971028		
	US 1999-300434	A3	19990428		

OS MARPAT 129:2225
AB The invention provides a compn. of matter (I): V-L-R where V is an org. group having binding affinity for an angiotensin II receptor site, L is a

linker moiety or a bond, and R is a moiety detectable in in vivo imaging of a human or animal body, with the provisos that where V is angiotensin or a peptidic angiotensin deriv. or analog then V-L-R is other than a nonmetal radionuclide substituted peptide (e.g. 125I substituted angiotensin II) and L-V is other than simply a peptide with a chelating agent amide bonded to a side chain thereof. This compn. of matter may be used to image cardiovascular diseases and disorders.

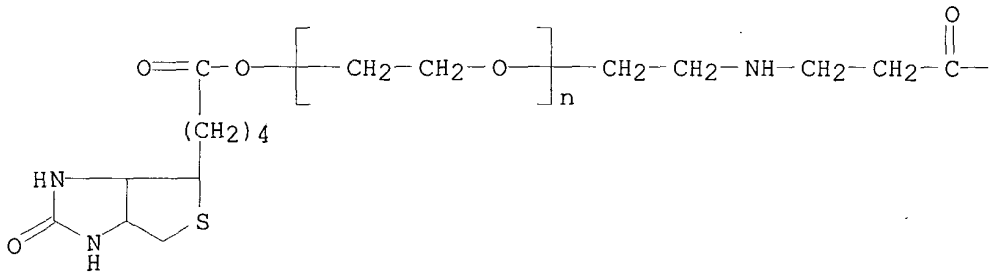
IT **207400-84-8P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of angiotensin receptor binding contrast agents)

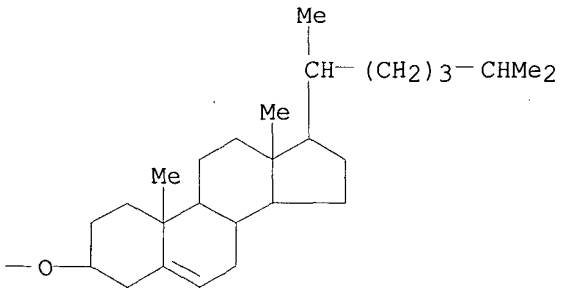
RN 207400-84-8 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),
.alpha.-[2-[[3-[(3.beta.)-cholest-5-en-3-yloxy]-
3-oxopropyl]amino]ethyl]-.omega.-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-
thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]oxy]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L66 ANSWER 24 OF 43 HCAPLUS COPYRIGHT 2001 ACS
AN 1998:300866 HCAPLUS
DN 129:4872
TI Preparation of targetable **diagnostic** and therapeutic gas-contg. or gas-generating ultrasound contrast agents
IN Klaveness, Jo; Rongved, Pal; Hogset, Anders; Tolleshaug, Helge; Naevestad, Anne; et al.
PA Marsden, John Christopher, UK; Nycomed Imaging AS; Klaveness, Jo; Rongved, Pal
SO PCT Int. Appl., 205 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 9

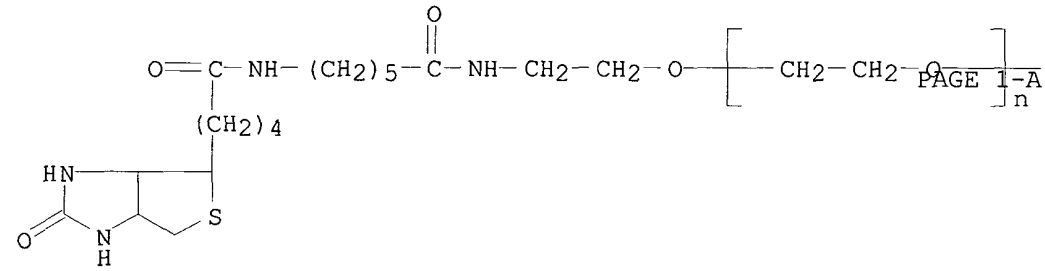
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9818501	A2	19980507	WO 1997-GB2954	19971028
	W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9747866	A1	19980522	AU 1997-47866	19971028
	AU 733495	B2	20010517		
	BR 9712683	A	19991019	BR 1997-12683	19971028
	CN 1234742	A	19991110	CN 1997-199047	19971028
	EP 973552	A2	20000126	EP 1997-910514	19971028
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2001503407	T2	20010313	JP 1998-520187	19971028
	NO 9901889	A	19990628	NO 1999-1889	19990421
PRAI	GB 1996-22366	A	19961028		
	GB 1996-22367	A	19961028		
	GB 1996-22368	A	19961028		
	GB 1997-699	A	19970115		
	GB 1997-8265	A	19970424		
	GB 1997-11842	A	19970606		
	GB 1997-11846	A	19970606		
	US 1997-49264	P	19970606		
	US 1997-49265	P	19970606		
	US 1997-49268	P	19970606		
	WO 1997-GB2954	W	19971028		

AB Targetable **diagnostic** and/or therapeutically active agents, e.g. ultrasound contrast agents, comprising a suspension in an aq. carrier liq. of a reporter comprising gas-contg. or gas-generated material, in which the reporter is coupled or linked to one or more non-bioactive vectors. Thus, a mixt. of phosphatidylserine, phosphatidylcholine, and biotinamidocaproate-PEG3400-L-Ala-cholesterol (prepn. given) was dispersed in 5% propylene glycol-water, flushed with perfluorobutane, and sonicated

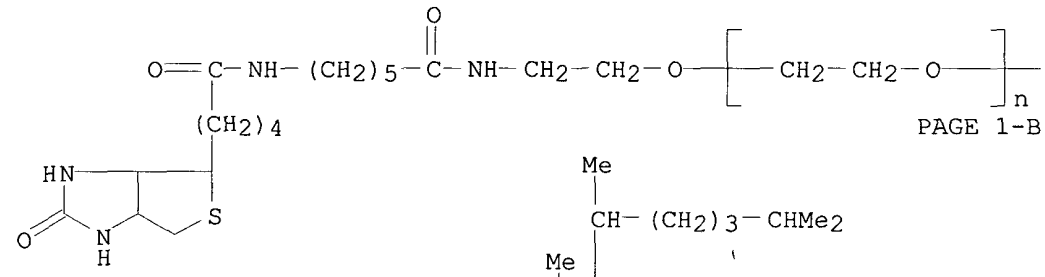
thieno[3,4-d]imidazol-4-yl)-1-oxopentyl]amino]-1-oxohexyl]amino]ethoxy]-,
IT **207287-11-4P 207287-12-5P 207287-13-6P**
207287-14-7P 207287-32-9P
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of targetable **diagnostic** and therapeutic gas-contg. or gas-generating ultrasound contrast agents linked to non-bioactive vectors)

PAGE 1-A

RN 207287-14-7 HCAPLUS
CN Poly(oxy-1,2-ethanediyl),
.alpha.-[[[2-[(3.beta.)-cholest-5-en-3-yloxy]-1-methyl-2-oxoethyl]amino]carbonyl]-.omega.-[2-[[6-[[5-(hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl)-1-oxopentyl]amino]-1-oxohexyl]amino]ethoxy]-, stereoisomer (9CI) (CA INDEX NAME)



PAGE 1-A



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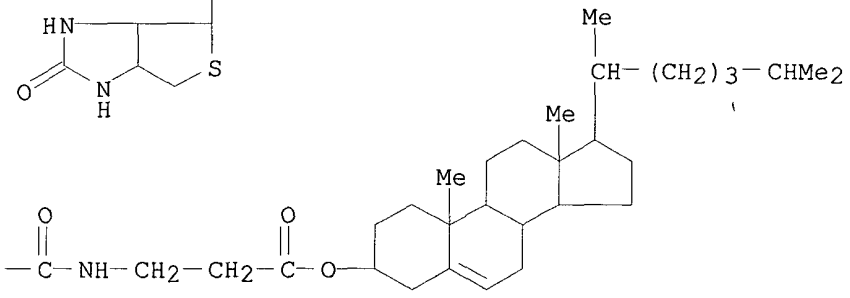
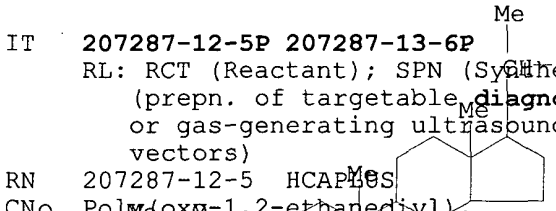


PAGE 1-B

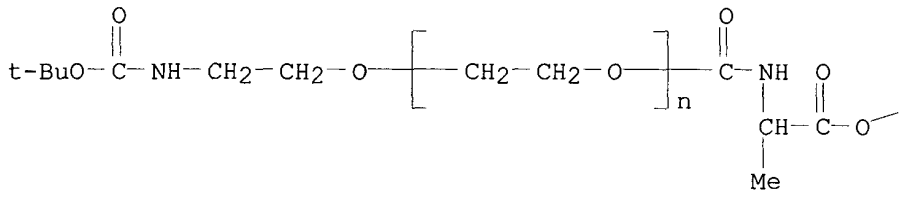
IT **207287-12-5P 207287-13-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of targetable **diagnostic** and therapeutic gas-contg. or gas-generating ultrasound contrast agents linked to non-bioactive vectors)



RN 207287-12-5 HCAPLUS
CN Poly(oxy-1,2-ethanediyl),
.alpha.-[[[2-[(3.beta.)-cholest-5-en-3-yloxy]-1-methyl-2-oxoethyl]amino]carbonyl]-.omega.-[2-[[(1,1-dimethylethoxy)carbonyl]amino]ethoxy]-, (S)- (9CI) (CA INDEX NAME)

RN 207287-32-9 HCAPLUS
CN Poly(oxy-1,2-ethanediyl),
.alpha.-[[[3-[(3.beta.)-cholest-5-en-3-yloxy]-3-

PAGE 1-A



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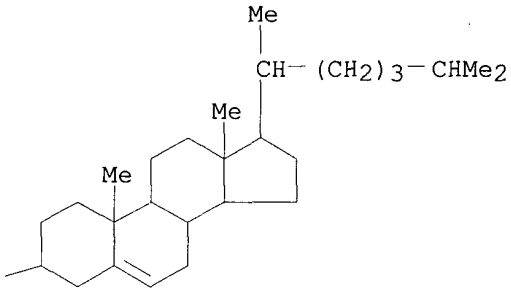
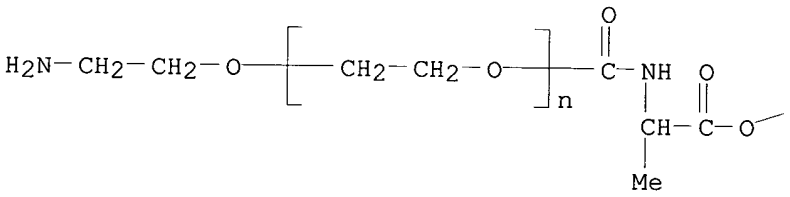
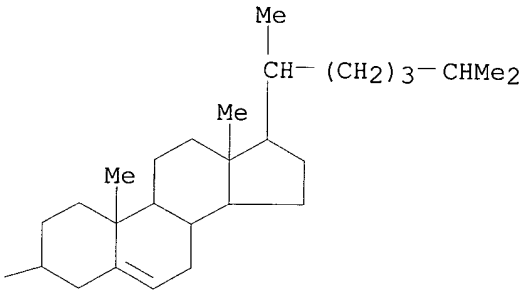


RN 207287-13-6 HCAPLUS
CN Poly(oxy-1,2-ethanediyl),
.alpha.-[[[2-[(3.beta.)-cholest-5-en-3-yloxy]-1-
methyl-2-oxoethyl]amino]carbonyl]-.omega.-(2-aminoethoxy)-, (S)- (9CI)
(CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L66 ANSWER 25 OF 43 HCAPLUS COPYRIGHT 2001 ACS
AN 1998:204002 HCAPLUS
DN 128:326418
TI Targetable HPMA copolymer-adriamycin conjugates. Recognition, internalization, and subcellular fate
AU Omelyanenko, V.; Kopeckova, P.; Gentry, C.; Kopecek, J.
CS Departments of Pharmaceutics and Pharmaceutical Chemistry/CCCD, University of Utah, Salt Lake City, UT, 84112, USA
SO J. Controlled Release (1998), 53(1-3), 25-37
CODEN: JCREEC; ISSN: 0168-3659
PB Elsevier Science B.V.
DT Journal
LA English
AB Recognition, internalization, and subcellular trafficking of N-(2-hydroxypropyl)methacrylamide (HPMA) copolymer conjugates contg. N-acylated galactosamine (GalN) or monoclonal OV-TL16 antibodies (Ab) have been investigated in human hepatocarcinoma HepG2 and ovarian carcinoma OVCAR-3 cells, resp. The intrinsic **fluorescence** of

fluorescein or adriamycin (ADR) attached to HPMA copolymers permitted us to follow the subcellular fate of HPMA copolymer conjugates by confocal **fluorescence** microscopy and **fluorescence** spectroscopy. The pattern of **fluorescence** during incubation of HPMA copolymer-ADR-GalN conjugate contg. lysosomally degradable tetrapeptide (GFLG) side-chains with HepG2 cells was consistent with conjugate recognition, internalization, localization in lysosomes, followed by the release of ADR from the polymer chains and ultimately diffusion via the cytoplasm into the cell nuclei. A similar pattern was obsd. in OVCAR-3 cells for Ab targeted HPMA copolymer conjugates. To test our hypothesis that HPMA-copolymer-bound anticancer **drugs** will be inaccessible to the energy-driven P-glycoprotein efflux pump in multidrug resistant (MDR) cells, we have compared the internalization of the HPMA copolymer-ADR conjugates by sensitive (A2780) and ADR-resistant (A2780/AD) ovarian carcinoma cell lines. Preliminary data on relative retention of ADR in MDR (A2780/AD) cells indicate a higher intracellular ADR concn. after incubation with HPMA copolymer-ADR conjugate when compared to incubation with free (unbound) ADR.

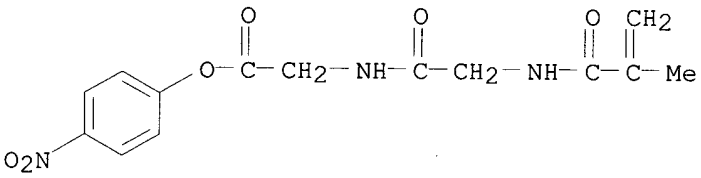
IT **57950-81-9DP**, reaction products with adriamycin and antibodies
100424-72-4DP, reaction products with adriamycin and antibodies
206868-51-1DP, reaction products with adriamycin
206868-52-2DP, reaction products with adriamycin
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn., recognition, internalization and subcellular fate of methacrylamide polymer-adriamycin **conjugates**)

RN 57950-81-9 HCAPLUS

CN Glycine, N-(2-methyl-1-oxo-2-propenyl)glycyl-, 4-nitrophenyl ester, polymer with N-(2-hydroxypropyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

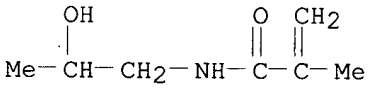
CM 1

CRN 57950-79-5
CMF C14 H15 N3 O6



CM 2

CRN 21442-01-3
CMF C7 H13 N O2

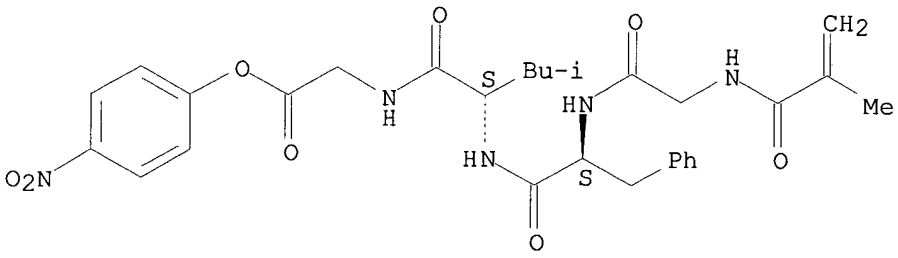


RN 100424-72-4 HCAPLUS
CN Glycine, N-(2-methyl-1-oxo-2-propenyl)glycyl-L-phenylalanyl-L-leucyl-, 4-nitrophenyl ester, polymer with N-(2-hydroxypropyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

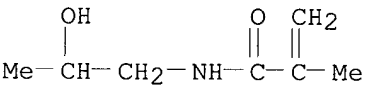
CRN 100424-71-3
CMF C29 H35 N5 O8
CDES 5:L,L

Absolute stereochemistry.



CM 2

CRN 21442-01-3
CMF C7 H13 N O2

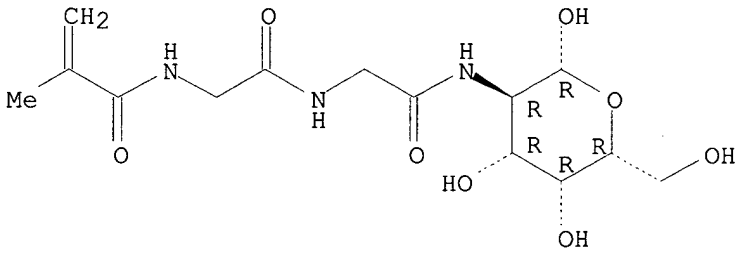


RN 206868-51-1 HCAPLUS
CN Glycine, N-(2-methyl-1-oxo-2-propenyl)glycyl-, 4-nitrophenyl ester, polymer with 2-deoxy-2-[[N-(2-methyl-1-oxo-2-propenyl)glycylglycyl]amino]-.beta.-D-galactopyranose and N-(2-hydroxypropyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

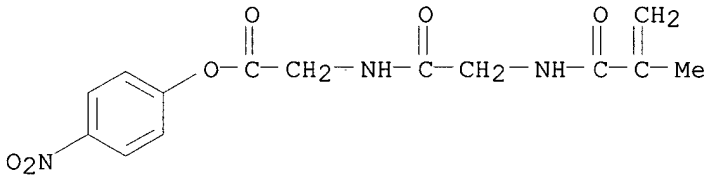
CRN 206868-50-0
CMF C14 H23 N3 O8

Absolute stereochemistry.



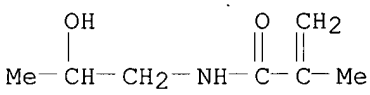
CM 2

CRN 57950-79-5
CMF C14 H15 N3 O6



CM 3

CRN 21442-01-3
CMF C7 H13 N O2

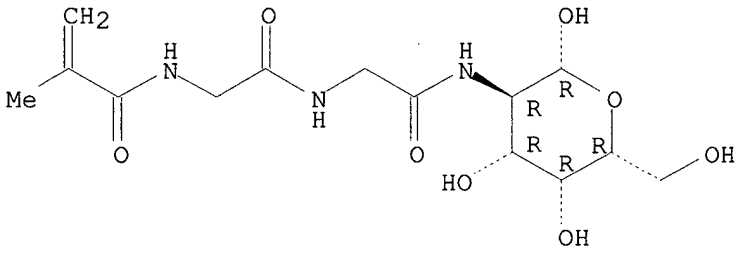


RN 206868-52-2 HCAPLUS
CN 2-5-Tachykinin-related peptide Ib (Cancer borealis), N-(2-methyl-1-oxo-2-propenyl)-, 4-nitrophenyl ester, polymer with 2-deoxy-2-[[N-(2-methyl-1-oxo-2-propenyl)glycylglycyl]amino]-.beta.-D-galactopyranose and N-(2-hydroxypropyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 206868-50-0
CMF C14 H23 N3 O8

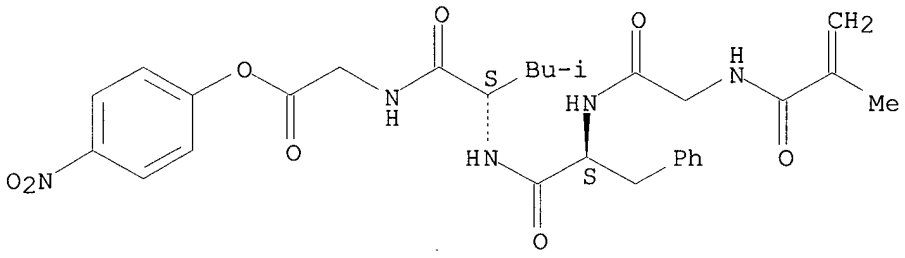
Absolute stereochemistry.



CM 2

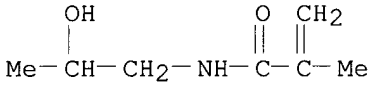
CRN 100424-71-3
CMF C29 H35 N5 O8
CDES 5:L,L

Absolute stereochemistry.



CM 3

CRN 21442-01-3
CMF C7 H13 N O2

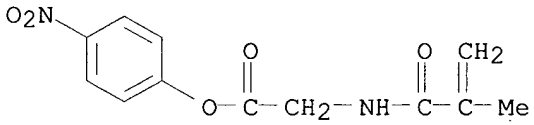


L66 ANSWER 26 OF 43 HCAPLUS COPYRIGHT 2001 ACS
AN 1998:109670 HCAPLUS
DN 128:235044
TI HPMA copolymer-anticancer **drug**-OV-TL16 antibody conjugates. II. Processing in epithelial ovarian carcinoma cells in vitro
AU Omelyanenko, Vladimir; Gentry, Christine; Kopeckova, Pavla; Kopecek, Jindrich
CS Departments of Pharmaceutics and Pharmaceutical Chemistry/CCCD and of Bioengineeiring, University of Utah, Salt Lake City, UT, 84112-9452, USA
SO Int. J. Cancer (1998), 75(4), 600-608
CODEN: IJCNAW; ISSN: 0020-7136

PB Wiley-Liss, Inc.
DT Journal
LA English
AB The binding, internalization, subcellular trafficking and in vitro cytotoxicity of N-(2-hydroxypropyl)methacrylamide (HPMA) copolymer-anti-cancer **drug**-OV-TL16 antibody (Ab) conjugates in the ovarian carcinoma OVCAR-3 cell line have been investigated. Adriamycin (ADR) and meso chlorin e6 mono(N-2-aminoethylamide) (Mce6) photosensitizer were used as anti-cancer **drugs**. Targeted (Ab-contg.) conjugates were compared with non-targeted HPMA copolymer-**drug** conjugates and with free **drugs**. Targeted conjugates were taken up rapidly by cells and detected within lysosomes by confocal **fluorescence** microscopy. The ADR attached to polymer chains via a degradable GFLG spacer was released from the conjugate, diffused via the lysosomal membrane into the cytoplasm and ultimately accumulated in the cell nuclei. In contrast, conjugates contg. ADR bound via the GG spacer accumulated in the lysosomes, but no **fluorescence** could be detected in the cell nuclei. Binding the **drugs** to a non-targeted HPMA copolymer decreased their cytotoxicity in vitro. The IC50 dose increased from 2 pM for free ADR to 150 .mu.M for P(GFLG)-ADR (P is the HPMA copolymer backbone) and from 0.34 pM for free Mce6 (with light) to 290 .mu.M for P-(GG)-Mce6. However, attachment of OV-TL16 Abs rendered HPMA copolymer-**drug** conjugates biorecognizable by OVCAR-3 cells and markedly increased their cytotoxicity. The IC50 doses were 4.4 and 0.38 .mu.M for the targeted conjugates P(GFLG)-ADR-Ab and P(GG)-Mce6-Ab (with light), resp. Biorecognition was shown to be specific by inhibition expts. with free Ab.
The findings indicate the potential of these conjugates as effective agents in the treatment of ovarian cancer.
IT **62238-85-1DP**, reaction products with adriamycin or Mce6 and antibodies **100424-72-4DP**, reaction products with adriamycin or Mce6 and antibodies
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)
(HPMA copolymer-anticancer **drug**-OV-TL16 antibody **conjugates** processing in epithelial ovarian carcinoma cells in vitro)
RN 62238-85-1 HCAPLUS
CN Glycine, N-(2-methyl-1-oxo-2-propenyl)-, 4-nitrophenyl ester, polymer with N-(2-hydroxypropyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

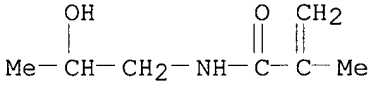
CM 1

CRN 57982-58-8
CMF C12 H12 N2 O5



CM 2

CRN 21442-01-3
CMF C7 H13 N O2

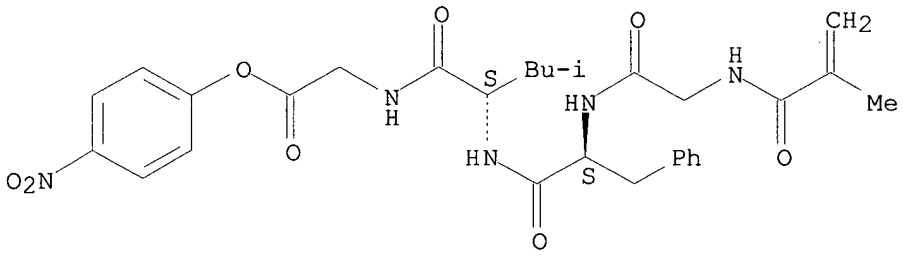


RN 100424-72-4 HCAPLUS
CN Glycine, N-(2-methyl-1-oxo-2-propenyl)glycyl-L-phenylalanyl-L-leucyl-, 4-nitrophenyl ester, polymer with N-(2-hydroxypropyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

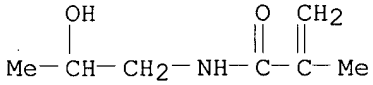
CRN 100424-71-3
CMF C29 H35 N5 O8
CDES 5:L,L

Absolute stereochemistry.



CM 2

CRN 21442-01-3
CMF C7 H13 N O2



L66 ANSWER 27 OF 43 HCAPLUS COPYRIGHT 2001 ACS
AN 1997:623067 HCAPLUS
DN 127:283382
TI Targeting macromolecular prodrugs to T lymphocytes
IN Prakash, Ramesh K.; Kopecek, Jindrich; Kopeckova, Pavla; Omelyanenko, Vladimir
PA Theratech, Inc., USA; University of Utah Research Foundation
SO PCT Int. Appl., 58 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9733618	A1	19970918	WO 1997-US3832	19970312
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	RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	CA 2247432	AA	19970918	CA 1997-2247432	19970312
	AU 9722057	A1	19971001	AU 1997-22057	19970312
	AU 708304	B2	19990729		
	EP 904109	A1	19990331	EP 1997-915001	19970312
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	BR 9711081	A	20000111	BR 1997-11081	19970312
PRAI	US 1996-616693		19960315		
	WO 1997-US3832		19970312		

AB A compn. for intracellular **delivery** of a chem. agent into a T cell comprises a receptor-binding and endocytosis-inducing ligand and a chem. agent coupled to a water-sol. polymer. The ligand binds to a receptor on T lymphocytes and elicits endocytosis of the compn. The compn. also includes a spacer for coupling the chem. agent and the ligand to the polymer. Chem. agents can include cytotoxins, transforming **nucleic** acids, gene regulators, labels, antigens, **drugs**, and the like. A preferred water sol. polymer is a copolymer of N-(2-hydroxypropyl)methacrylamide (HPMA). The compn. can further comprise a carrier such as a water sol. polymer, liposome, or particulate. Methods of using these compns. for **delivering** a chem. agent in vivo or in vitro are also disclosed.

IT **100424-72-4DP**, reaction products with adriamycin and peptide
RL: BAC (Biological activity or effector, except adverse); PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(targeting macromol. prodrugs to T lymphocytes)

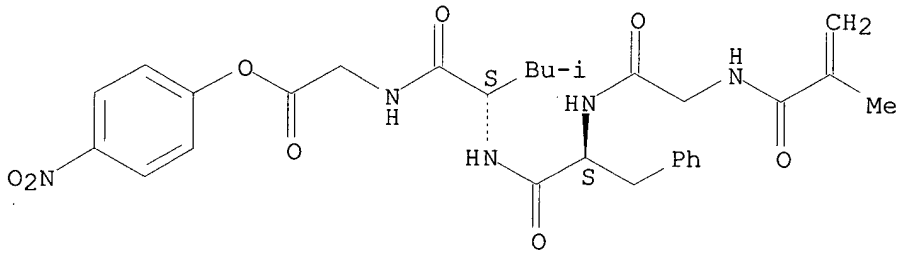
RN 100424-72-4 HCAPLUS
CN Glycine, N-(2-methyl-1-oxo-2-propenyl)glycyl-L-phenylalanyl-L-leucyl-, 4-nitrophenyl ester, polymer with N-(2-hydroxypropyl)-2-methyl-2-

propenamide (9CI) (CA INDEX NAME)

CM 1

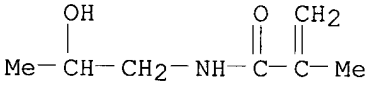
CRN 100424-71-3
CMF C29 H35 N5 O8
CDES 5:L,L

Absolute stereochemistry.



CM 2

CRN 21442-01-3
CMF C7 H13 N O2



L66 ANSWER 28 OF 43 HCAPLUS COPYRIGHT 2001 ACS
AN 1997:518349 HCAPLUS
DN 127:162389
TI Solution and Photoproperties of N-(2-Hydroxypropyl)methacrylamide Copolymer-Meso-chlorin e6 Conjugates
AU Shiah, Jane-Guo; Konak, Cestmir; Spikes, John D.; Kopecek, Jindrich
CS Departments of Pharmaceutics and Pharmaceutical Chemistry/CCCD and of Bioengineering, University of Utah, Salt Lake City, UT, 84112, USA
SO J. Phys. Chem. B (1997), 101(35), 6803-6809
CODEN: JPCBFK; ISSN: 1089-5647
PB American Chemical Society
DT Journal
LA English
AB The soln. properties of N-(2-hydroxypropyl)methacrylamide (HPMA) copolymers contg. various nos. of meso-chlorin e6 monoethylenediamine (Mce6) mols. attached to the copolymer via either glycine (Gly) or tetrapeptide (GlyPheLeuGly) side chains were studied. Dynamic light scattering, spectroscopic, **fluorescence** quenching, and time-resolved **fluorescence** techniques were used. The photosensitizing efficiencies of the various derivs. were also examd. Reactions were measured in aq. sodium phosphate buffer (SPB) and EtOH. The dynamic light scattering data indicate that the intermol. aggregation

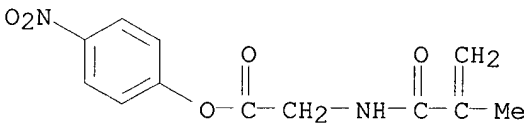
of Mce6 species within the HPMA copolymer conjugates is not important at the conjugate concn. measured (5 .times. 10-4 g/mL). However, intramol. aggregation of the hydrophobic Mce6 moieties does occur and was studied using absorption and **fluorescence** techniques. The degree of intramol. aggregation was decreased by the addn. of detergents or EtOH to the SPB solns. The cationic detergent, CTAB, strongly enhanced the **fluorescence** of the copolymer conjugates due to its efficient electrostatic interactions with the neg. charged Mce6 species. It also significantly increased the relative quantum yield of O uptake during the copolymer conjugate-sensitized photooxidn. of furfuryl alc. The obsd. iodide quenching of copolymer conjugate **fluorescence** implies that hydrophobic domains of aggregated Mce6 moieties may exist in SPB solns. of the conjugates. The time-resolved **fluorescence** decay measurements showed that about 15% of the Mce6 species are aggregated in SPB solns. of those copolymer conjugates with the highest Mce6 content. There was no aggregation of free Mce6 mols. in SPB solns. at the concns. used.

IT **62238-85-1D**, reaction products with mesochlorin e6 monoethylenediamine disodium salt **100424-72-4D**, reaction products with meso-chlorin e6 monoethylenediamine disodium salt
RL: MOA (Modifier or additive use); USES (Uses)
(cationic surfactant effect on soln. and photoproperties of (hydroxypropyl)methacrylamide copolymer-meso-chlorin e6 **conjugates**)

RN 62238-85-1 HCAPLUS
CN Glycine, N-(2-methyl-1-oxo-2-propenyl)-, 4-nitrophenyl ester, polymer with
N-(2-hydroxypropyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

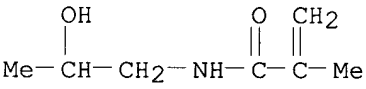
CM 1

CRN 57982-58-8
CMF C12 H12 N2 O5



CM 2

CRN 21442-01-3
CMF C7 H13 N O2



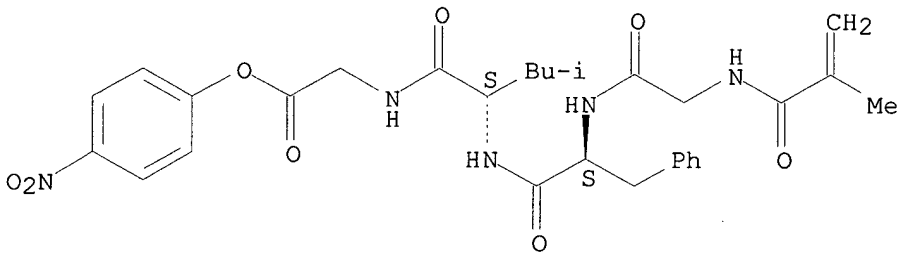
RN 100424-72-4 HCAPLUS
CN Glycine, N-(2-methyl-1-oxo-2-propenyl)glycyl-L-phenylalanyl-L-leucyl-,

4-nitrophenyl ester, polymer with N-(2-hydroxypropyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

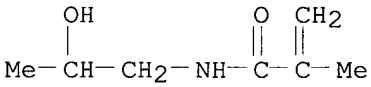
CRN 100424-71-3
CMF C29 H35 N5 O8
CDES 5:L,L

Absolute stereochemistry.



CM 2

CRN 21442-01-3
CMF C7 H13 N O2



L66 ANSWER 29 OF 43 HCAPLUS COPYRIGHT 2001 ACS
AN 1997:216339 HCAPLUS
DN 126:305720
TI Selectin receptors: preparation of spacer-armed sulfated trisaccharides Lewis A and Lewis X and neoglycoconjugates thereof
AU Zemlyanukhina, T. V.; Nifant'ev, N. E.; Shashkov, A. S.; Tsvetkov, Y. E.; Bovin, N. V.
CS M.M. Shemyakin Inst. Bioorganic Chem., Russian Acad. Sci., Moscow, Russia
SO Carbohydr. Lett. (1995), 1(4), 277-284
CODEN: CLETEC; ISSN: 1073-5070
PB Harwood
DT Journal
LA English
AB HSO3-3Gal.beta.1-3(Fuc.alpha.1-4)GlcNAc.beta.1-O(CH2)3NH2 and HSO3-3Gal.beta.1-4-(Fuc.alpha.1-3)GlcNAc.beta.1-O(CH2)3NH2 were synthesized by regioselective sulfation (Py.cntdot.SO3Py) of protected trisaccharidic Lea and Lex derivs. bearing unsubstituted hydroxyls at C2, C3 and C4 of galactose moiety, Bn-6Gal.beta.1-3/4(Bn3Fuc.alpha.1-4/3)-6-BnGlcNAc.beta.1-o(CH2)3NHCOCF3, followed by conventional deprotection. Coupling of the aminopropyl glycosides with poly(4-nitrophenylacrylate) gave the resp. polyacrylamide (PAA) based conjugates. Biotinylated and

fluorescent probes Sug-PAA-Biot and Sug-PAA-Flu were obtained as well.

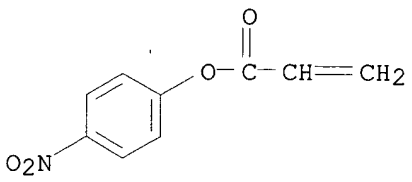
IT **67391-52-0DP**, Poly(4-nitrophenylacrylate), **conjugates** with oligosaccharide and biotinylated or **fluorescent** probes
RL: SPN (Synthetic preparation); PREP (Preparation)
(synthesis of spacer-armed sulfated trisaccharides Lewis A and Lewis X as selectin receptors)

RN 67391-52-0 HCAPLUS

CN 2-Propenoic acid, 4-nitrophenyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 2123-85-5
CMF C9 H7 N O4



L66 ANSWER 30 OF 43 HCAPLUS COPYRIGHT 2001 ACS
AN 1996:577842 HCAPLUS
DN 125:219609
TI Chemically-defined non-polymeric valency platform molecules and conjugates thereof
IN Coutts, Stephen M.; Jones, David S.; Livingston, Douglas A.; Yu, Lin
PA La Jolla Pharmaceutical Company, USA
SO U.S., 59 pp. Cont.-in-part of U.S. 5,276,013.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 8

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5552391	A	19960903	US 1993-152506	19931115
	US 5162515	A	19921110	US 1990-494118	19900313
	JP 05505520	T2	19930819	JP 1991-503584	19910115
	US 5268454	A	19931207	US 1991-652648	19910208
	AU 9214118	A1	19920907	AU 1992-14118	19920204
	AU 646157	B2	19940210		
	JP 05508421	T2	19931125	JP 1992-505775	19920204
	JP 2544873	B2	19961016		
	NO 9202781	A	19920714	NO 1992-2781	19920714
	FI 9203241	A	19920715	FI 1992-3241	19920715
	US 5276013	A	19940104	US 1992-914869	19920715
	US 6060056	A	20000509	US 1993-118055	19930908
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     EP 642798          A3   19980916
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     CA 2171434         AA   19950316       CA 1994-2171434  19940908
     WO 9507073         A1   19950316       WO 1994-US10031  19940908
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             MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA,
             US, UZ
         RW: KE, MW, SD, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC,
             NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD,
TG
     AU 9477209         A1   19950327       AU 1994-77209    19940908
     AU 677710          B2   19970501
     EP 722318          A1   19960724       EP 1994-928016   19940908
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT,
SE
     CN 1134109         A    19961023       CN 1994-193993   19940908
     JP 09500389        T2   19970114       JP 1994-508766   19940908
     US 5606047         A    19970225       US 1995-453254   19950530
     US 5633395         A    19970527       US 1995-453452   19950530
     NO 9600952         A    19960502       NO 1996-952      19960307
     FI 9601100         A    19960508       FI 1996-1100     19960308
PRAI US 1990-466138          19900116
     US 1990-494118          19900313
     US 1991-652648          19910208
     US 1992-914869          19920715
     US 1993-118055          19930908
     WO 1991-US293           19910115
     WO 1992-US975           19920204
     US 1993-142598          19931022
     US 1993-152506          19931115
     EP 1993-309288          19931122
     WO 1994-US10031         19940908
```

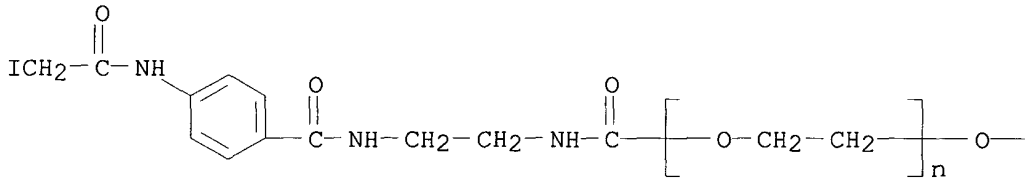
AB Chem.-defined, non-polymeric valency platform mols. and conjugates comprising chem.-defined valency platform mols. and biol. or chem. mols. including **polynucleotide** duplexes of at least 20 base pairs that have significant binding activity for human lupus anti-dsDNA autoantibodies. The **polynucleotide** duplex-contg. conjugates are useful as toleragen for treating human autoimmune disease or systemic lupus erythematosus. In example, chem.-defined valency platform mols. were synthesized, conjugated with **polynucleotide** (PN) and hemagglutinin or sheep red blood cell, and used as toleragen to reduce PN-specific antibody-producing cells. Similarly, conjugates of the platform mols. and melittin peptides were prepd. for tolerizing mice to melittin.

IT **181469-52-3P**
RL: MOA (Modifier or additive use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(chem.-defined non-polymeric valency platform mols. and **conjugates** with **polynucleotide** or melittin as toleragen for autoimmune disease or systemic lupus erythematosus or bee venom)

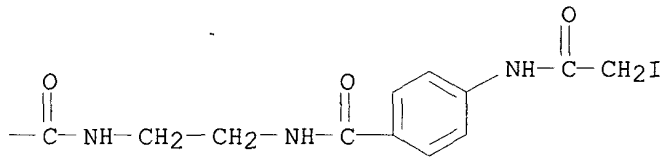
RN 181469-52-3 HCAPLUS
CN Poly(oxy-1,2-ethanediyl),
.alpha.-[[[2-[[4-[(iodoacetyl)amino]benzoyl]amin

o]ethyl]amino]carbonyl]-.omega.-[[[2-[[4-[(iodoacetyl)amino]benzoyl]amino]
ethyl]amino]oxy]- (9CI) (CA INDEX NAME)

PAGE 1-A

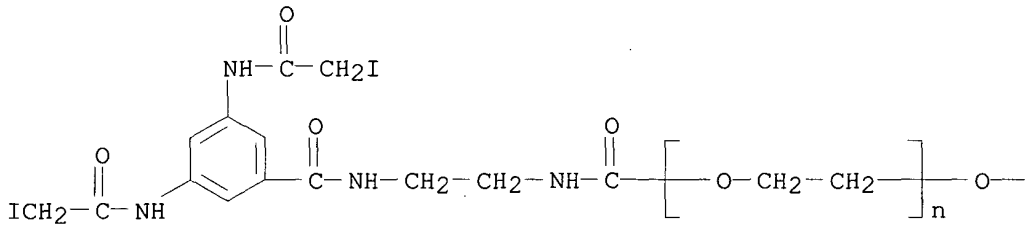


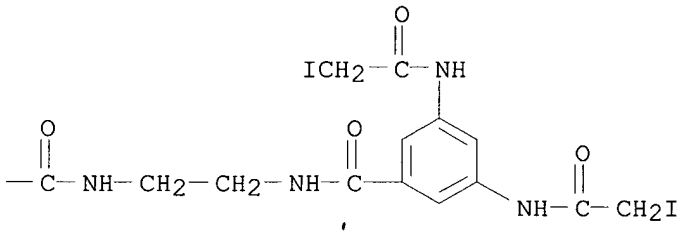
PAGE 1-B



IT **154231-81-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(chem.-defined non-polymeric valency platform mols. and
conjugates with **polynucleotide** or melittin as
toleragen for autoimmune disease or systemic lupus erythematosus or
bee
venom)
RN 154231-81-9 HCAPLUS
CN Poly(oxy-1,2-ethanediyl),
.alpha.-[[[2-[[3,5-bis[(iodoacetyl)amino]benzoyl
]amino]ethyl]amino]carbonyl]-.omega.-[[[[2-[[3,5-
bis[(iodoacetyl)amino]benzoyl]amino]ethyl]amino]carbonyl]oxy]- (9CI) (CA
INDEX NAME)

PAGE 1-A





L66 ANSWER 31 OF 43 HCAPLUS COPYRIGHT 2001 ACS
AN 1996:136529 HCAPLUS
DN 124:270103
TI HPMA copolymer-anticancer **drug**-OV-TL16 antibody conjugates. 1. Influence of the method of synthesis on the binding affinity to OVCAR-3 ovarian carcinoma cells in vitro
AU Omelyanenko, V.; Kopeckova, P.; Gentry, C.; Shiah, J.-G.; Kopecek, J.
CS Dep. Pharm. and Pharm. Chem./CCCD, Univ. Utah, Salt Lake City, UT, 84112, USA
SO J. Drug Targeting (1996), 3(5), 357-73
CODEN: JDTAEH; ISSN: 1061-186X
DT Journal
LA English
AB The influence of different methods of binding the OV-TL16 antibody and its Fab' fragment to N-(2-hydroxypropyl)methacrylamide (HPMA) copolymer-**drug** [adriamycin (ADR) or meso chlorin e6 mono(N-2-aminoethylamide) (Mce6)] conjugates on the affinity of conjugates to an ovarian carcinoma (OVCAR-3) cell assocd. antigen was investigated. The binding of the antibody to HPMA copolymer-**drug** (ADR or Mce6) conjugates via amino groups resulted in conjugates which were heterogeneous in their antigen binding. Coupling the HPMA copolymer-Mce6 conjugate to the carbohydrate region of the antibody resulted in conjugates with a more homogeneous distribution of affinity consts. than conjugates prepd. by linking the antibody to the polymer via amino groups. However, both methods resulted in a decrease in the affinity const. compared to the native antibody. Conjugates prepd. with the Fab' fragment of the OV-TL16 antibody demonstrated a more homogeneous affinity than either conjugate prepd. with the whole antibody. To verify the hypothesis that the changes in the binding affinity and homogeneity are a consequence of conformational changes in the antibody structure, a series of physicochem. methods were employed characterize the conjugates. The excitation energy transfer between OV-TL16 antibody and **drugs** (ADR and Mce6) and the spectral properties of Mce6 were used to monitor the interactions between the antibody and **drugs**. The quenching of the intrinsic **fluorescence** of the antibody was also employed to study its conformational changes. An attempt has been made to correlate the biorecognition at the cellular surface with the interactions

of **drug** with the antibody mol. and with the changes in antibody conformation.

IT **57950-81-9P 100424-72-4DP,** reaction products with adriamycin or chlorin deriv. and antibodies
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(HPMA copolymer-anticancer **drug**-OV-TL16 antibody **conjugates;** prepn. and binding affinity to OVCAR-3 ovarian carcinoma cells)

RN 57950-81-9 HCAPLUS

CN Glycine, N-(2-methyl-1-oxo-2-propenyl)glycyl-, 4-nitrophenyl ester, polymer with N-(2-hydroxypropyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

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CRN 57950-79-5
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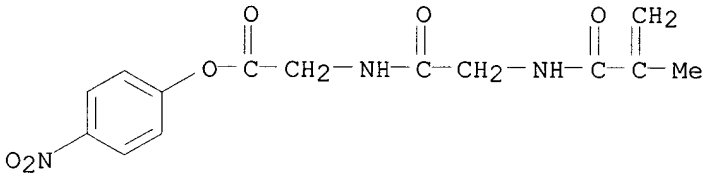
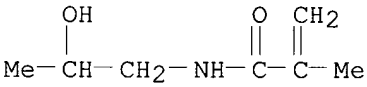


CM 2

CRN 21442-01-3
CMF C7 H13 N O2



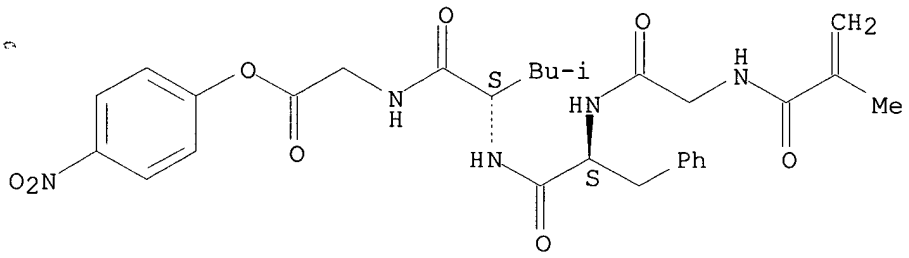
RN 100424-72-4 HCAPLUS

CN Glycine, N-(2-methyl-1-oxo-2-propenyl)glycyl-L-phenylalanyl-L-leucyl-, 4-nitrophenyl ester, polymer with N-(2-hydroxypropyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 100424-71-3
CMF C29 H35 N5 O8
CDES 5:L,L

Absolute stereochemistry.



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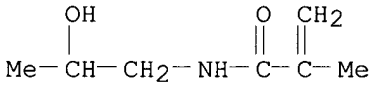
CRN 21442-01-3
CMF C7 H13 N O2



L66 ANSWER 32 OF 43 HCAPLUS COPYRIGHT 2001 ACS
AN 1995:894427 HCAPLUS
DN 123:287684
TI Association of a Substituted Zinc(II) Phthalocyanine-N-(2-Hydroxypropyl)methacrylamide Copolymer Conjugate
AU Gu, Zhong-wei; Omelyanenko, Vladimir; Kopeckova, Pavla; Kopecek, Jindrich;
Konak, Cestmir
CS Department of Bioengineering, University of Utah, Salt Lake City, UT, 84112, USA
SO Macromolecules (1995), 28(24), 8375-80
CODEN: MAMOBX; ISSN: 0024-9297
DT Journal
LA English
AB The soln. properties of a N-(2-hydroxypropyl)methacrylamide (HPMA) copolymer contg. Zn(II) 4,9,16,23-tetraaminophthalocyanine (HPMA-TAPC-Zn copolymer) attached to the copolymer via oligopeptide side chains (GFLGG) was studied using light scattering and spectroscopic methods. The light scattering data indicated that the copolymer formed aggregates in aq. solns. stable down to c = 2 .times. 10-5 g/mL. The extent of aggregation decreased with increasing concn. of detergents in buffer solns. or in org.
solvents in mixed solvents as Tris buffer/DMSO. Dramatic changes in the aggregate formation were obsd. in the vicinity of a mixt. compn. of 60 vol
% DMSO. The local interactions of hydrophobic TAPC-Zn species were studied by absorption and **fluorescence** spectrometry. The majority of all TAPC-Zn species are dimerized in aq. solns. by hydrophobic
interactions and hydrogen bonds. The proportion of TAPC-Zn monomers and dimers of TAPC-Zn estd. for Tris buffer/DMSO mixts. from both the

absorption and **fluorescence** spectra was correlated to the aggregation behavior of the copolymer. The copolymer aggregation was explained by the random assocn. model. Mostly point-like contacts formed by TAPC-Zn dimers are supposed for aq. solns. of HPMA-TAPC-Zn copolymer.

IT **100424-72-4D**, reaction products with glycyl zinc tetraaminophthalocyanine
RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)
(effect of org. solvents and low-mol.-wt. detergents on assocn. of substituted zinc phthalocyanine-N- (hydroxypropyl)methacrylamide copolymer **conjugate** in aq. solns.)

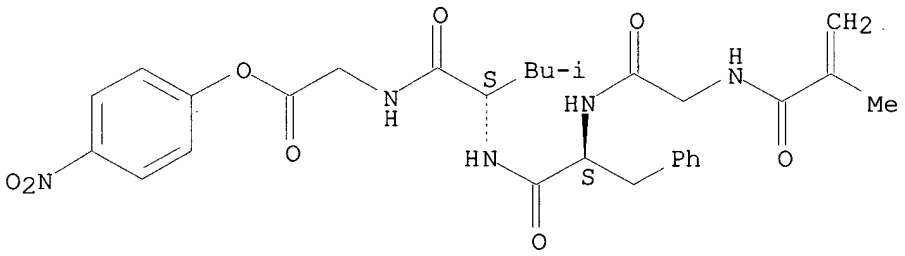
RN 100424-72-4 HCAPLUS

CN Glycine, N-(2-methyl-1-oxo-2-propenyl)glycyl-L-phenylalanyl-L-leucyl-, 4-nitrophenyl ester, polymer with N-(2-hydroxypropyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 100424-71-3
CMF C29 H35 N5 O8
CDES 5:L,L

Absolute stereochemistry.



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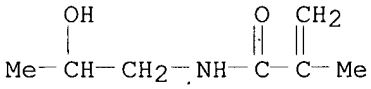
CRN 21442-01-3
CMF C7 H13 N O2



L66 ANSWER 33 OF 43 HCAPLUS COPYRIGHT 2001 ACS

AN 1995:892826 HCAPLUS

DN 124:290272

TI Preparation of chemically-defined non-polymeric valency platform molecules and conjugates thereof.

IN Coutts, Stephen; Jones, David S.; Livingston, Douglas Alan; Yu, Lin

PA La Jolla Pharmaceutical Co., Can.

SO Eur. Pat. Appl., 76 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 8

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 642798	A2	19950315	EP 1993-309720	19931203
	EP 642798	A3	19980916		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
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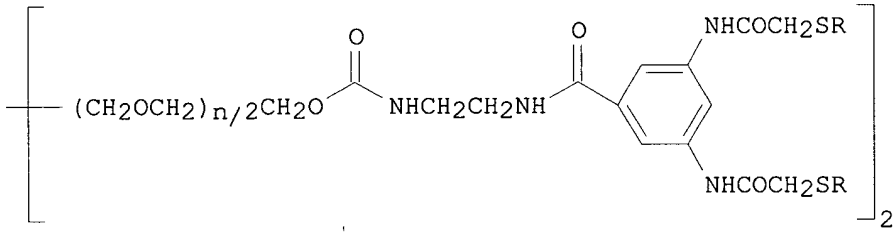


I

NO
uses
cites linker

AB Conjugates comprising biol. or chem. mols., including **polynucleotide** duplexes of at least 20 base pairs that have significant binding activity for human lupus anti-dsDNA autoantibodies, reacted with valency platforms G1(T1)n, G2[L2J2Z2(pT2)]m [G1, G2 = null, (branched) chain contg. 1-2000 atoms selected from C, N, O, Si, P, S; T1, T2 = NHR, CONHNHR, NHNHR, CO2H, CO2R1, COX, SO2X, SH, OH, etc.; R = H, alkyl, cycloalkyl, aralkyl; R1 = N-succinimidyl, p-nitrophenyl, pentafluorophenyl, etc.; X = halo, other leaving group; L2 = null, O, NR, S; J2 = null, CO, CS; Z2 = radical contg. 1-200 atoms selected from C, H, N, O, Si, P, S, and contg. attachment sites for functional groups; n, m = 1-32; p = 1-8; with provisos], were prepd. Thus, title conjugate (I; R = H-Trp-Ile-Lys-Arg-Lys-Arg-Gln-Gln-Lys-Cys-Gly-OH, bound through a cysteine S atom; n = approx. 74) (prepn. given) at 1000 .mu.g/mouse in mice primed and boosted with the parent protein melittin gave an 86.8% redn. in peptide specific plaque forming cells.

IT **169744-34-7P**
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

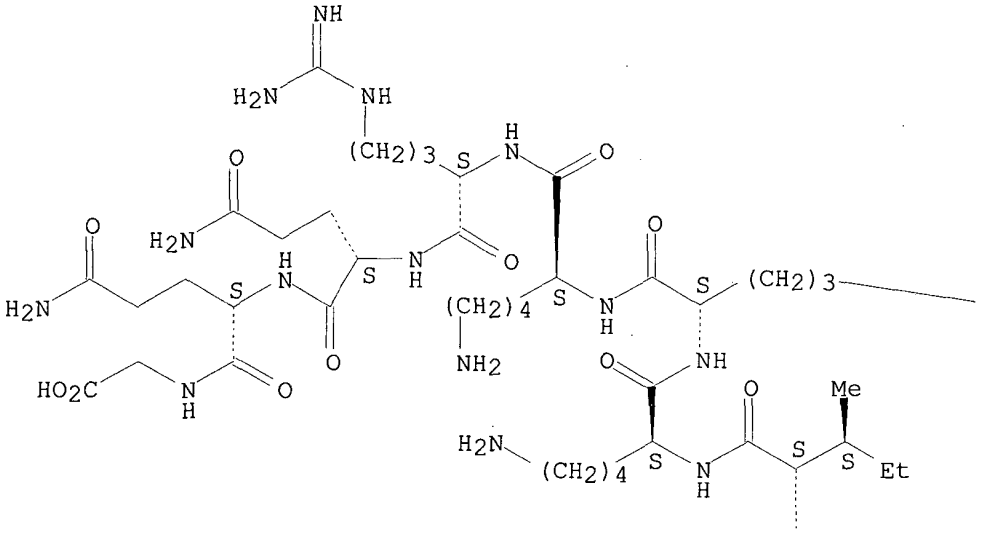
(prepn. of chem.-defined non-polymeric valency platform mols. and **conjugates** thereof)

RN 169744-34-7 HCAPLUS

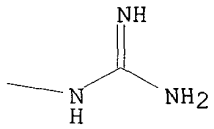
CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-(oxydi-2,1-ethanediyl)bis[.omega.-hydroxy-, 1,1'-diester with 3-[[2-[[4-[[[2-(carboxyamino)ethyl]amino]carbonyl]phenyl]amino]-2-oxoethyl]dithio]-L-alanyl-L-tryptophyl-L-isoleucyl-L-lysyl-L-arginyl-L-lysyl-L-arginyl-L-glutaminyl-L-glutaminylglycine (9CI) (CA INDEX NAME)

Absolute stereochemistry.

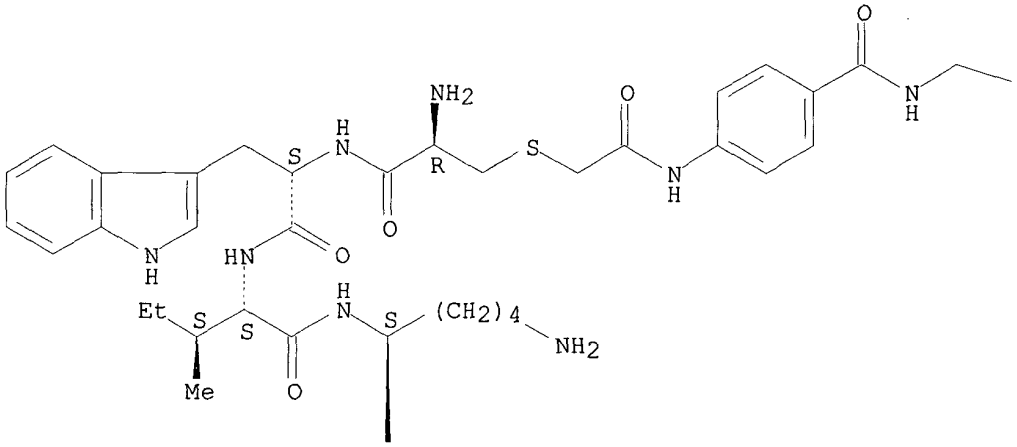
PAGE 1-C



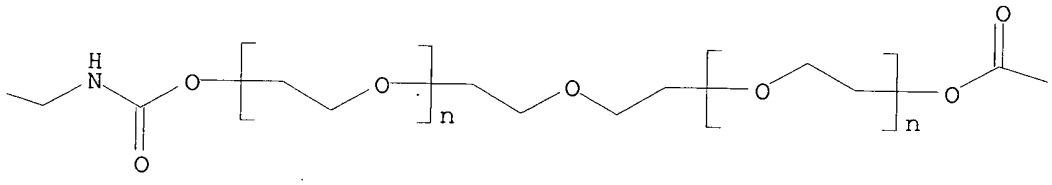
PAGE 1-D



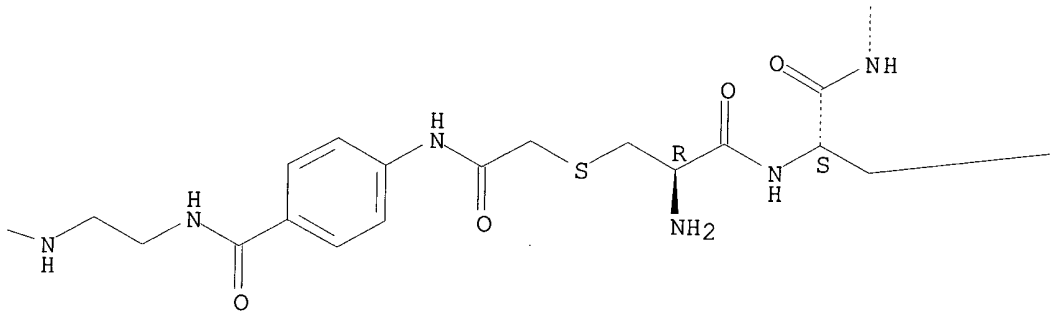
PAGE 2-A



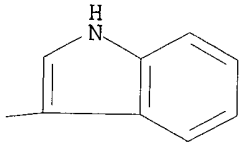
PAGE 2-B



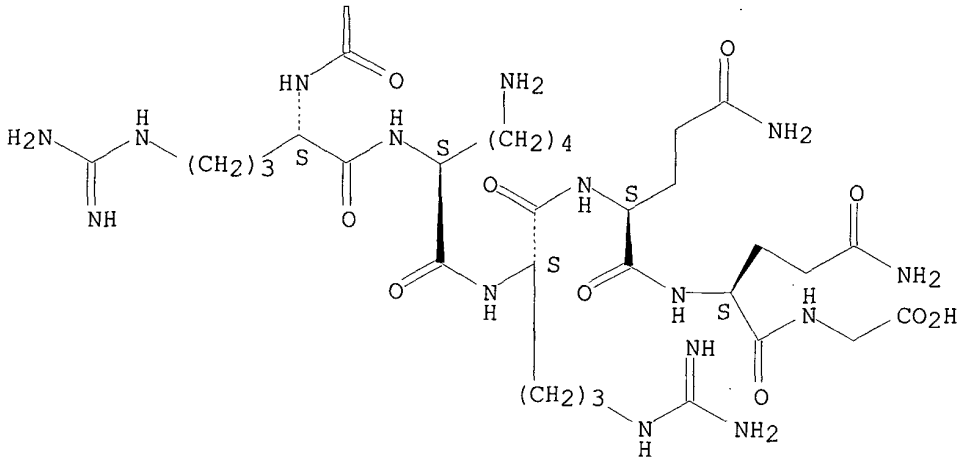
PAGE 2-C



PAGE 2-D



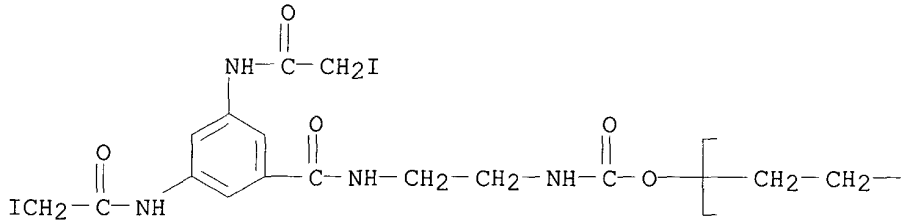
PAGE 3-A



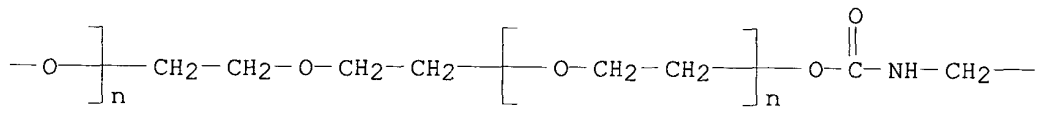
IT **169744-01-8P 169744-31-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of chem.-defined non-polymeric valency platform mols. and **conjugates** thereof)
RN 169744-01-8 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-(oxydi-2,1-

ethanediyl)bis[.omega.-[[[[2-[[3,5-bis[(iodoacetyl)amino]benzoyl]amino]eth
yl]amino]carbonyl]oxy]- (9CI) (CA INDEX NAME)

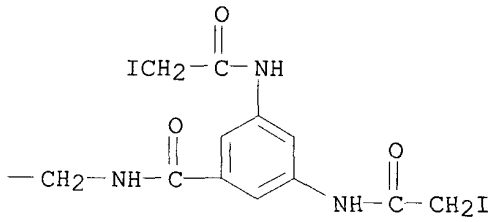
PAGE 1-A



PAGE 1-B

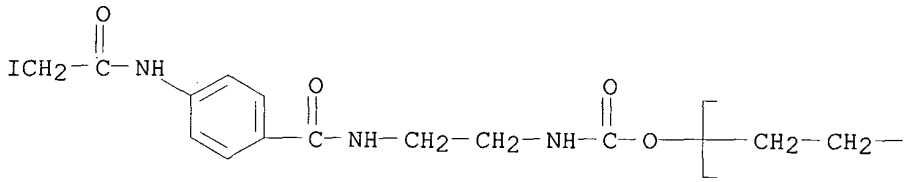


PAGE 1-C

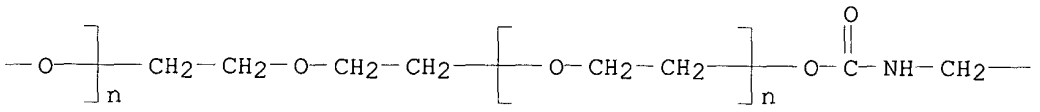


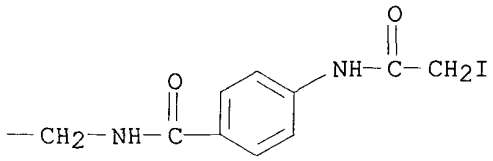
RN 169744-31-4 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-(oxydi-2,1-ethanediyl)bis[.omega.-[[[2-[[4-[(iodoacetyl)amino]benzoyl]amino]ethyl]amino]carbonyl]oxy]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B





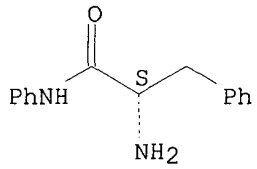
L66 ANSWER 34 OF 43 HCAPLUS COPYRIGHT 2001 ACS
AN 1994:574260 HCAPLUS
DN 121:174260
TI Imprinted dispersion polymers: a new class of easily accessible affinity stationary phases
AU Sellergren, Boerje
CS Department of Analytical Chemistry, University of Lund, P.O. Box 124, Lund, S-221 00, Swed.
SO J. Chromatogr., A (1994), 673(1), 133-41
CODEN: JCRAEY
DT Journal
LA English
AB Non-stabilizing dispersion polymn. in combination with mol. imprinting was used to prep. agglomerates of globular micron-sized particles exhibiting mol. recognition properties. These could be prepd. either in situ in a chromatog. column or sep. followed by wet or dry packing of the material. This allowed a rapid chromatog. evaluation of the mol. recognition properties of the materials. Depending on the monomer concn. and the solvency of the dispersion medium the particle dispersity, the degree of particle agglomeration and the av. particle size varied. The choice of dispersion medium was mainly dictated by the template soly. and the nature of the interactions between the functionalized monomers (methacrylic acid) and the template used for producing the mol. recognition sites. Addn. of water to the dispersion medium allowed imprinting of the poorly sol. template pentamidine (PAM), a **drug** used for the treatment of AIDS-related disorders. The PAM-imprinted materials prepd. in situ in the chromatog. column strongly retained the **drug** in the chromatog. evaluation compared to the retention of PAM on a ref. material prepd. using benzamidine as template (sepn. factor .alpha.' = 6.8). Meanwhile weakly or moderately basic templates from the group **nucleotide** bases (tri-O-acetyladenosine), herbicides (atrazine) and chiral amino acid derivs. (L-phenylalanine anilide) required low temp. and exclusion of water during imprinting in order to produce the recognition effect.
IT **157791-92-9P**
RL: PREP (Preparation)
(prepn. of, as chromatog. stationary phase, by mol. imprinting)
RN 157791-92-9 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with (S)-.alpha.-amino-N-phenylbenzenepropanamide and 1,2-ethanediyl bis(2-methyl-2-propenoate)

(9CI) (CA INDEX NAME)

CM 1

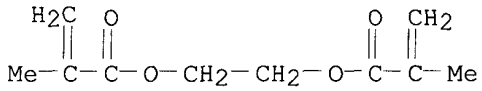
CRN 15423-54-8
CMF C15 H16 N2 O
CDES 1:S

Absolute stereochemistry.



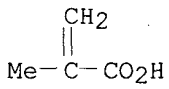
CM 2

CRN 97-90-5
CMF C10 H14 O4



CM 3

CRN 79-41-4
CMF C4 H6 O2

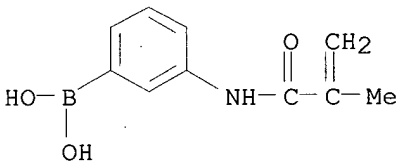


L66 ANSWER 35 OF 43 HCAPLUS COPYRIGHT 2001 ACS
AN 1994:517466 HCAPLUS
DN 121:117466
TI Preparation and characterization of a glucose-responsive insulin-releasing
polymer device
AU Shiino, Daijiro; Murata, Yoshishige; Kataoka, Kazunori; Koyama, Yoshiyuki;
Yokoyama, Masayuki; Okano, Teruo; Sakurai, Yasuhisa
CS Int. Cent. Biomater. Sci., Noda., 278, Japan
SO Biomaterials (1994), 15(2), 121-8
CODEN: BIMADU; ISSN: 0142-9612
DT Journal

LA English
AB A new glucose-responsive insulin **delivery** system composed of phenylboronic acid (PBA) groups was prepd. and investigated. Complexation of various diol-contg. mols. with PBA gel beads was evaluated using frontal chromatog. The structural features of the diol-contg. mols. strongly influenced their binding to PBA gels beads. In particular, open-chain monosaccharides demonstrated higher assocn. consts. (ca 9.5 .times. 102 to 5.1 .times. 103 l/mol) than glucose (ca 6.3 .times. 102 l/mol). Furthermore, a model system utilizing a **fluorescent** deriv. of tris(hydroxymethyl)aminomethane was synthesized and bound to PBa gel beads. The mols. were released in a pulsatile manner in response to glucose. In addn., gluconic acids were chem. attached to insulin mols. The modified insulin, contg. two gluconic acid units per insulin mol., was isolated using ion-exchange chromatog. This gluconic acid-modified insulin (G-Ins) was bound onto a PBA gel column, and the G-Ins release profile in response to varying glucose concns. was investigated. The results demonstrate that the PBA gel beads release G-Ins in response to glucose concn. Thus, this new system may be applied for self-regulated insulin **delivery**.
IT **136043-29-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, for glucose-responsive insulin-releasing device)
RN 136043-29-3 HCAPLUS
CN Boronic acid, [3-[(2-methyl-1-oxo-2-propenyl)amino]phenyl]-, polymer with N,N'-methylenebis[2-propenamide] and 2-propenamide (9CI) (CA INDEX NAME)

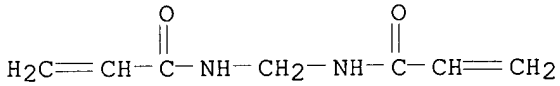
CM 1

CRN 48150-45-4
CMF C10 H12 B N O3



CM 2

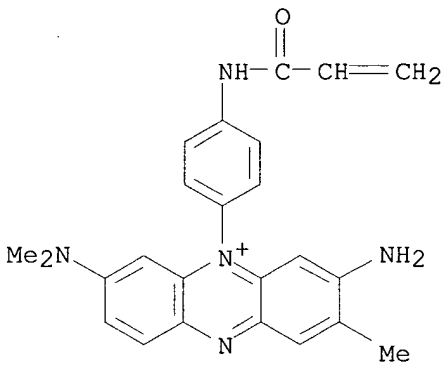
CRN 110-26-9
CMF C7 H10 N2 O2

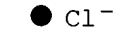


DN 118:96449
TI Change of the higher order structure of **DNA** induced by the complexation with intercalating synthetic polymer, as is visualized by **fluorescence** microscopy
AU Minagawa, Keiji; Matsuzawa, Yukiko; Yoshikawa, Kenichi; Masubuchi, Yuichi; Matsumoto, Mitsuhiro; Doi, Masao; Nishimura, Chitoshi; Maeda, Mizuo
CS Grad. Sch. Hum. Inf., Nagoya Univ., Nagoya, 464-01, Japan
SO Nucleic Acids Res. (1993), 21(1), 37-40
CODEN: NARHAD; ISSN: 0305-1048
DT Journal
LA English
AB The electrophoretic movement and Brownian motion of T4DNA, .lambda. **DNA** and their complexes with polyacrylamide (PAAm) via intercalative unit from 5-[(4-acryloylamino)phenyl]-3-amino-7-(dimethylamino)-2-methylphenazinium chloride were obsd. using **fluorescence** microscopy. It was found that T4DNA/PAAm complex migrates slower than T4DNA alone in gel electrophoresis, although they exhibit similar conformational change during the migration. Quant. analyses of the translational diffusion of the .lambda.**DNA** and its complex in soln. demonstrate that the **DNA** mols. extend due to intercalative binding of PAAm, suggesting the pseudo-grafting structure of the complex.
IT **77139-07-2**
RL: PRP (Properties)
(**DNA** intercalation with, **nucleic** acid conformational dynamics response to)
RN 77139-07-2 HCAPLUS
CN Phenazinium, 3-amino-7-(dimethylamino)-2-methyl-5-[4-[(1-oxo-2-propenyl)amino]phenyl]-, chloride, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

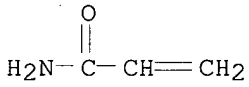
CRN 67197-14-2
CMF C24 H24 N5 O . Cl





CM 2

CRN 79-06-1
CMF C3 H5 N O



L66 ANSWER 39 OF 43 HCAPLUS COPYRIGHT 2001 ACS
AN 1991:663193 HCAPLUS
DN 115:263193
TI Bioadhesive water-soluble polymeric **drug** carriers for site-specific oral **drug delivery**. Synthesis, characterization, and release of 5-aminosalicylic acid by Streptococcus faecium in vitro
AU Grim, Y.; Kopecek, J.
CS Cent. Controlled Chem. Delivery, Univ. Utah, Salt Lake City, UT, 84112, USA
SO New Polym. Mater. (1991), 3(1), 49-59
CODEN: NPMAE8; ISSN: 0169-6424
DT Journal
LA English
AB Water-sol. N-(2-hydroxypropyl)methacrylamide (HPMA) copolymers were synthesized which combine the concepts of colon-specific **delivery** and bioadhesion. A reactive polymeric precursor, a copolymer of HPMA and N-methacryloylglycylglycine p-nitrophenyl ester, was consecutively aminolyzed with .beta.-aminoethyl p-aminobenzamide and galactosamine (model of bioadhesive moiety). The arom. amino group was diazotized and [14C]-salicylic acid was bound via arom. azo bonds. The release of 5-aminosalicylic acid (5-ASA) was studied using an isolated strain of

bacteria, S. faecium, which is commonly present in the colon. An enhanced
effect on cleavage using redox mediators, benzyl viologen and FMN, was obsd.

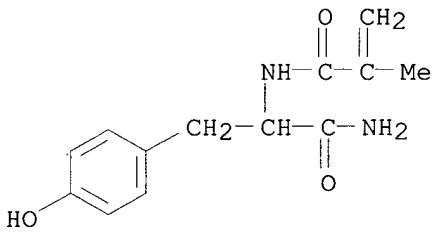
IT **137292-72-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and aminolysis of)

RN 137292-72-9 HCAPLUS

CN Glycine, N-[N-(2-methyl-1-oxo-2-propenyl)glycyl]-, 4-nitrophenyl ester, polymer with 4-hydroxy-.alpha.-[(2-methyl-1-oxo-2-propenyl)amino]benzenepropanamide and N-(2-hydroxypropyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

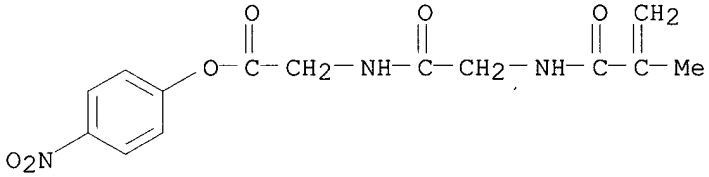
CM 1

CRN 113063-49-3
CMF C13 H16 N2 O3



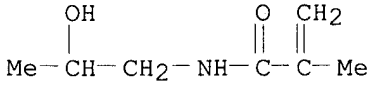
CM 2

CRN 57950-79-5
CMF C14 H15 N3 O6



CM 3

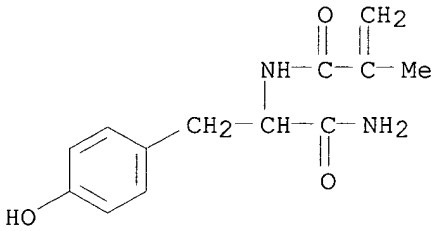
CRN 21442-01-3
CMF C7 H13 N O2



IT **137292-72-9DP**, reaction products with aminoethylaminobenzamide and galactosamine and salicylic acid
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and **drug** release from)
RN 137292-72-9 HCAPLUS
CN Glycine, N-[N-(2-methyl-1-oxo-2-propenyl)glycyl]-, 4-nitrophenyl ester, polymer with 4-hydroxy-.alpha.-[(2-methyl-1-oxo-2-propenyl)amino]benzenepropanamide and N-(2-hydroxypropyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

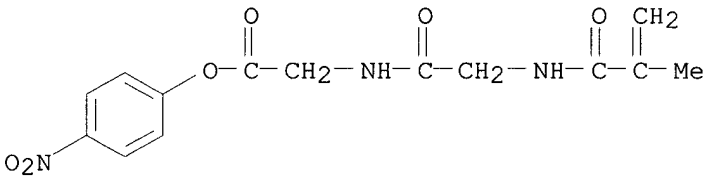
CM 1

CRN 113063-49-3
CMF C13 H16 N2 O3



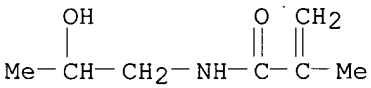
CM 2

CRN 57950-79-5
CMF C14 H15 N3 O6



CM 3

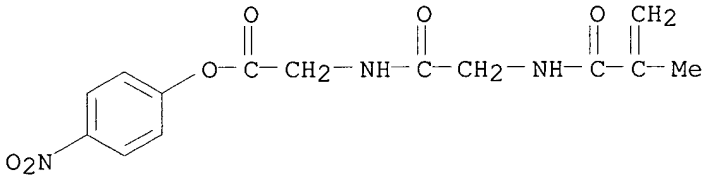
CRN 21442-01-3
CMF C7 H13 N O2



L66 ANSWER 40 OF 43 HCAPLUS COPYRIGHT 2001 ACS
AN 1989:193552 HCAPLUS
DN 110:193552
TI Optically controlled ligand **delivery**. 1. Synthesis of water-soluble copolymers containing photocleavable bonds
AU Yen, Hung Ren; Kopecek, Jindrich; Andrade, Joseph D.
CS Dep. Mater. Sci. Eng., Univ. Utah, Salt Lake City, UT, 84112, USA
SO Makromol. Chem. (1989), 190(1), 69-82
CODEN: MACEAK; ISSN: 0025-116X
DT Journal
LA English
AB To verify the possibility of developing a ligand **delivery** system which is controlled by light pulses, copolymers was synthesized of N-(2-hydroxypropyl)methacrylamide (1) contg. side-chains terminated in ligands (tert-BuO2CNHCH2CO2H, **fluorescein**, tetramethylrhodamine) bound via photocleavable 2-nitrobenzyl groups. Copolymers in soln. were exposed to light of wavelength .apprxeq.360 nm which resulted in release of the bound ligands. Depending on the exptl. conditions (type of solvent, presence of O) changes in the structure of released fluorochromes were obsd. (photofading effect). These effects were quantified by detg. the binding consts. of released modified fluorochromes with monoclonal antifluorescyl antibodies.
IT **57950-81-9DP**, N-(2-Hydroxypropyl)methacrylamide-N-methacryloylglycylglycine-4-nitrophenyl ester copolymer, fluorochrome derivs.
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and photocleavage of, antibody binding in relation to)
RN 57950-81-9 HCAPLUS
CN Glycine, N-(2-methyl-1-oxo-2-propenyl)glycyl-, 4-nitrophenyl ester, polymer with N-(2-hydroxypropyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

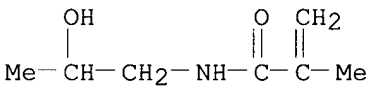
CM 1

CRN 57950-79-5
CMF C14 H15 N3 O6



CM 2

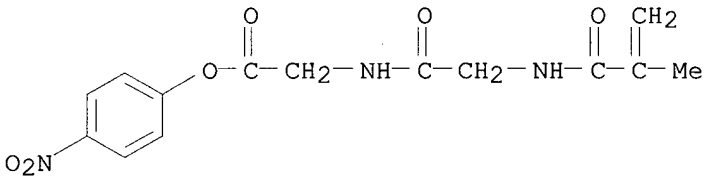
CRN 21442-01-3
CMF C7 H13 N O2



IT **57950-81-9P**, N-(2-Hydroxypropyl)methacrylamide-N-methacryloylglycylglycine-4-nitrophenyl ester copolymer
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and reaction of, with ethylenediamine)
RN 57950-81-9 HCAPLUS
CN Glycine, N-(2-methyl-1-oxo-2-propenyl)glycyl-, 4-nitrophenyl ester, polymer with N-(2-hydroxypropyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

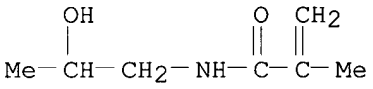
CM 1

CRN 57950-79-5
CMF C14 H15 N3 O6



CM 2

CRN 21442-01-3
CMF C7 H13 N O2



L66 ANSWER 41 OF 43 HCAPLUS COPYRIGHT 2001 ACS
AN 1987:614271 HCAPLUS
DN 107:214271
TI Synthetic water-soluble copolymers for optically-controlled ligand **delivery**
AU Yen, Hung Ren; Kopecek, Jindrich; Andrade, Joseph D.
CS Dep. Mater. Sci. Eng., Univ. Utah, Salt Lake City, UT, 84112, USA
SO Polym. Mater. Sci. Eng. (1987), 57, 243-7
CODEN: PMSEDG; ISSN: 0743-0515
DT Journal
LA English
AB To verify the possibility of developing a ligand system which is controlled by light pulses, N-(2-hydroxypropyl)methacrylamide copolymers

contg. side-chains terminated in ligands (BOC-Gly, **fluorescein**, tetamethylrhodamine) bound via photocleavable 2-nitrobenzyl groups were synthesized. Copolymers in soln. were exposed to light 360 nm which resulted in release of the bound ligand. Depending on the exptl. conditions (type of solvent, presence of oxygen) changes in the structure of released fluorochromes were obsd. (photofading effect). These effects were quantified by detg. the binding consts. of released modified fluorochrome with monoclonal antifluorescyl antibodies.

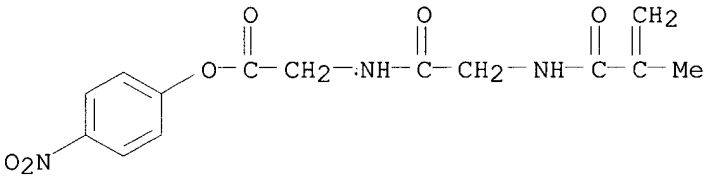
IT **57950-81-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and reaction of, with ethylenediamine)

RN 57950-81-9 HCAPLUS

CN Glycine, N-(2-methyl-1-oxo-2-propenyl)glycyl-, 4-nitrophenyl ester, polymer with N-(2-hydroxypropyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

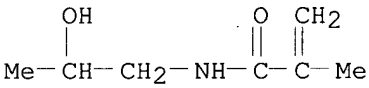
CM 1

CRN 57950-79-5
CMF C14 H15 N3 O6



CM 2

CRN 21442-01-3
CMF C7 H13 N O2



L66 ANSWER 42 OF 43 HCAPLUS COPYRIGHT 2001 ACS

AN 1983:574042 HCAPLUS

DN 99:174042

TI Immunogenicity of N-(2-hydroxypropyl)methacrylamide copolymers - potential hapten or **drug** carriers

AU Rihova, B.; Ulbrich, K.; Kopecek, J.; Mancal, P.

CS Inst. Microbiol., Czech. Acad. Sci., Prague, 142 20/4, Czech.

SO Folia Microbiol. (Prague) (1983), 28(3), 217-27
CODEN: FOMIAZ; ISSN: 0015-5632

DT Journal

LA English

AB The title copolymers were nonimmunogenic or only weakly immunogenic in mice. However, when modified with aminophenylarsonic acid or **fluorescein** isothiocyanate, the polymers were immunogenic with the antibodies directed toward the modifying haptenic groups.

IT **64328-80-9D**, reaction products with hexamethylenediamine and 4-aminophenylarsonic acid and **fluorescein** isothiocyanate
RL: BIOL (Biological study)
(immunogenicity of)

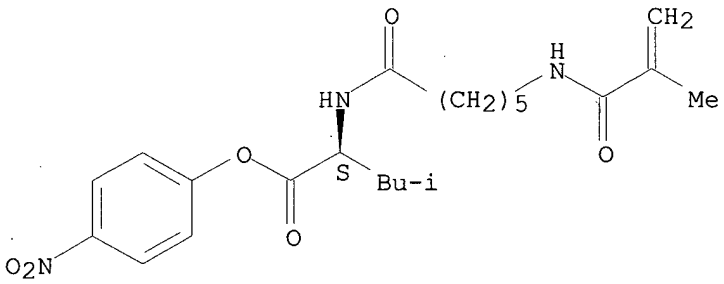
RN 64328-80-9 HCAPLUS

CN L-Leucine, N-[6-[(2-methyl-1-oxo-2-propenyl)amino]-1-oxohexyl]-, 4-nitrophenyl ester, polymer with N-(2-hydroxypropyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

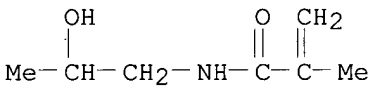
CRN 64325-19-5
CMF C22 H31 N3 O6
CDES 5:L

Absolute stereochemistry.



CM 2

CRN 21442-01-3
CMF C7 H13 N O2



L66 ANSWER 43 OF 43 HCAPLUS COPYRIGHT 2001 ACS

AN 1980:17276 HCAPLUS

DN 92:17276

TI Selective repression of transcription by base sequence specific synthetic polymers

AU Kosturko, L. D.; Dattagupta, N.; Crothers, D. M.

CS Dep. Chem., Yale Univ., New Haven, CT, 06520, USA

SO Biochemistry (1979), 18(26), 5751-6
CODEN: BICHAW; ISSN: 0006-2960

DT Journal

LA English

AB The effect of novel synthetic polymers on **DNA**-directed RNA synthesis in vitro is reported. The polymers contained base-selective monomers, including a GC-specific phenazine deriv. and an AT-specific triphenylmethane dye. Radical chain polymn. was carried out in aq. soln. by monomers bound to a template **DNA**, which was obtained either from phage .lambda. or T7. Polymers were isolated and reannealed with **DNA** samples, including competitive mixts. of T7 and .lambda. **DNAs**. Transcription from **DNA**-polymer complexes was measured by using Escherichia coli RNA polymerase and both the redn. in total transcription levels and the relative inhibition of .lambda.- or T7-specific transcription were detd. by using a hybridization assay. The results showed that micromolar concns. of individual dyes are sufficient to cause substantial inhibition of transcription when the dyes are incorporated into polymers. More significantly, a no. of the polymers inhibited more strongly transcription from the **DNA** which had served as template for polymer synthesis than from the **DNA** present as competitor in the annealing process. Thus, template synthesis of **DNA**-binding polymers can lead to preferential inhibition of function of the original template. The apparent relative affinity of polymer for competing **DNAs** can be altered by at least an order of magnitude depending on which **DNA** was used as the synthesis template. The results offer a new approach to improving the specificity of **DNA**-binding **drugs**.

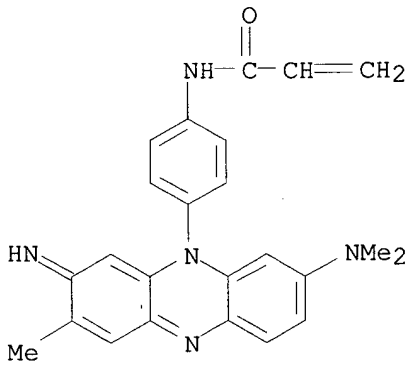
IT **72058-53-8**
RL: BIOL (Biological study)
(**DNA** transcription repression by, specificity of)

RN 72058-53-8 HCAPLUS

CN 2-Propenamide, N-[4-[bis[4-(dimethylamino)phenyl]methyl]phenyl]-, polymer with N-[2-(dimethylamino)ethyl]-2-propenamide and N-[4-[7-(dimethylamino)-3-imino-2-methyl-5(3H)-phenazinyl]phenyl]-2-propenamide (9CI) (CA INDEX NAME)

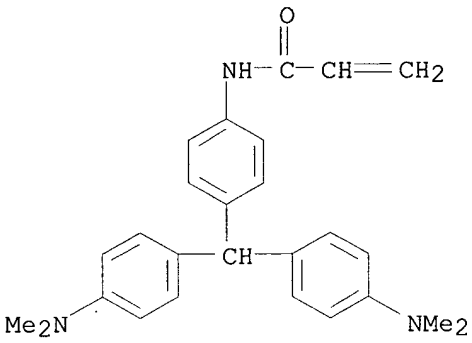
CM 1

CRN 72058-52-7
CMF C24 H23 N5 O



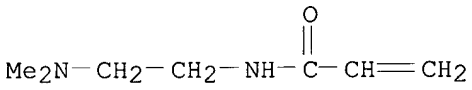
CM 2

CRN 71902-36-8
CMF C26 H29 N3 O



CM 3

CRN 925-76-8
CMF C7 H14 N2 O



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SCHNIZER 09/627,787

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L2                SCREEN 1838
L3             33 S L1 AND L2
L4         893893 S PMS/CI
L5             28 S L1 AND L2 SSS SAM SUB=L4
L6         619344 S L4 NOT SI/ELS AND NC<4
L7             37 S L1 AND L2 SSS SAM SUB=L6
L8          19386 S L1 AND L2 SSS FUL SUB=L6
L9         798843 S 591.49.57/RID OR OC5-C6/ES OR OC4-OC5-C6-C6-C6/ES OR
OC4-OC5-
L10         1465 S L8 AND L9

     FILE 'HCAPLUS' ENTERED AT 12:30:17 ON 27 SEP 2001
L11         1149 S L10
L12            4 S L11(L)?CONJUGAT?
L13           15 S L11 AND ?CONJUGAT?
L14      1643848 S FLUORO? OR FLUORE? OR MACROMOL? OR ?MEMBRAN? OR TRANSPORT?
L15          183 S L11 AND L14
L16       585556 S FLUORO? OR FLUORE?
L17          149 S L16 AND L15
L18            9 S L17 AND ( MACROMOL? OR ?MEMBRAN? OR TRANSPORT?)
L19            1 S L11 AND (DNA OR NUCLEIC OR ?NUCLEOTI? OR ?NUCLEOSID?)
L20            5 S L11 AND (MEDIC? OR PHARMA? OR DRUG OR DIAGNOSTIC)
L21            6 S L19-20

     FILE 'REGISTRY' ENTERED AT 12:45:11 ON 27 SEP 2001
                E FLUORESCEIN/CN
L22            1 S E3
L23        10200 S 7938.12.8/RID
L24            0 S L23 AND L8
L25        57815 S 2508.17.45/RID
L26          151 S L8 AND L25
L27               STR L1
L28               STR L27
L29               STR L28
L30               SCREEN 1839 AND 2006
L31               STR L29
L32           50 S L31 AND L30 SSS SAM SUB=L8
L33         4246 S L31 AND L30 SSS FUL SUB=L8
                  SAVE L33 SCH787P/A

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L34         2777 S L33
L35          104 S L34(L)BIOL/RL
L36          289 S L14 AND L34
L37            2 S L34 AND  (DNA OR NUCLEIC OR ?NUCLEOTI? OR ?NUCLEOSID?)
L38           53 S L34 AND (MEDIC? OR PHARMA? OR DRUG OR DIAGNOSTIC OR DELIV?)
L39       308882 S FLUOROPHOR? OR FLUORESC?
L40           17 S L39 AND L36
L41            6 S L33(L)?CONJUGAT?
L42           22 S L33 AND ?CONJUGAT?
```

all polymers

L9 - formulae for claimed rxns in cl 9

full search

1465 cpds

6 cites

Subset search, 4246 cpds

2 cites

```
L43          11 S L42 AND (BIOL/RL OR DRUG OR ?MOLECUL?  OR CYCLOSPORIN)
L44          11 S L42 NOT L43
L45          16 S L40 NOT (L37 OR L43 OR L44)

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L46       15140 S L8 NOT L33
L47       13932 S L46 NOT L10

     FILE 'REGISTRY' ENTERED AT 13:22:52 ON 27 SEP 2001
L48       13932 S L47
L49          11 S L48 AND  (DNA OR NUCLEIC OR ?NUCLEOTI? OR ?NUCLEOSID?)
L50          11 S L48 AND (DNA OR NUCLEIC OR OLIGONUCL? OR NUCLEOTID? OR
NUCLEO
L51           3 S L48 AND ("ADENYL" OR "GUAN" OR "CYTO" OR "THYMID")
L52          14 S L49-51
L53       13918 S L48 NOT L52

     FILE 'HCAPLUS' ENTERED AT 13:36:21 ON 27 SEP 2001
L54           2 S L52
L55        8178 S L53
L56          57 S L55  AND  (DNA OR NUCLEIC OR ?NUCLEOTI? OR ?NUCLEOSID?)
L57         141 S L55  AND L39
L58          96 S L55(L)?CONJUGAT?
L59         370 S L55 AND (MEDIC? OR PHARMA? OR DRUG OR DIAGNOSTIC OR DELIV?)
L60           5 S L56 AND L57
L61           8 S L56 AND L58
L62          15 S L56 AND L59
L63           9 S L57 AND L58
L64          18 S L57 AND L59
L65          43 S L60-64
L66          43 S L65 NOT (L54 OR L43-45)
L67          18 S (L55 OR L34 OR L11) AND ?FLUORESCEIN?
L68           7 S L67 NOT (L54 OR L66 OR L43-45)
L69          11 S L67 NOT L68
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11 cites

16 cites

← remaining cpds from L8 not yet crossed to CA

2 cites

43 cites

7 cites

11 cites

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=> d que l11
L1                  STR
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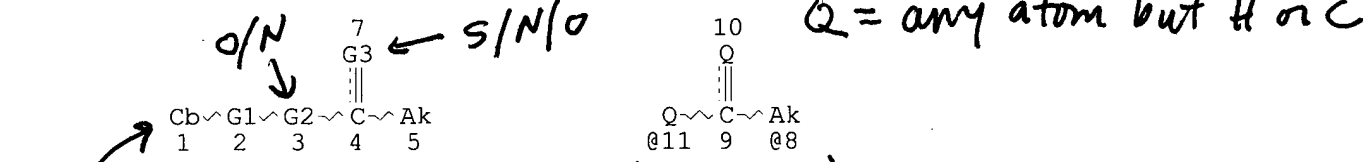


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VAR G3=S/N/O
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GGCAT   IS UNS  AT   1
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  10

STEREO ATTRIBUTES: NONE
L2                  SCR 1838
L4          893893 SEA FILE=REGISTRY ABB=ON  PLU=ON  PMS/CI
L6          619344 SEA FILE=REGISTRY ABB=ON  PLU=ON  L4 NOT SI/ELS AND NC<4
L8           19386 SEA FILE=REGISTRY SUB=L6 SSS FUL L1 AND L2
L9          798843 SEA FILE=REGISTRY ABB=ON  PLU=ON  591.49.57/RID OR OC5-C6/ES
                   OR OC4-OC5-C6-C6-C6/ES OR OC4-OC5-C6-C6-C6-C6-C6/ES OR
                   C6-C6-C6/ES
L10           1465 SEA FILE=REGISTRY ABB=ON  PLU=ON  L8 AND L9
L11           1149 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L10
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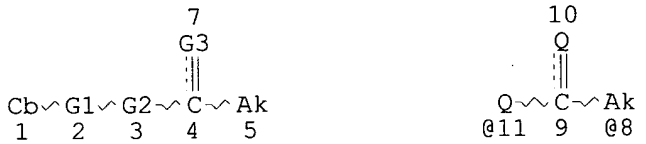
parent STR (same as previous page)



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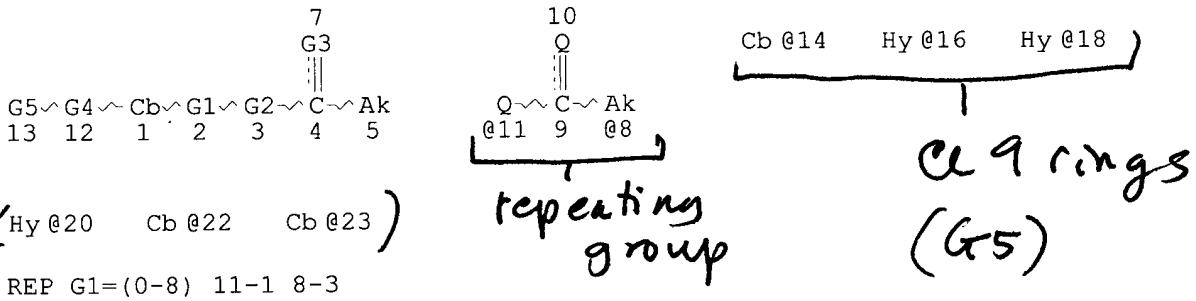
VAR G3=S/N/O
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
GGCAT IS UNS AT 1
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 10

STEREO ATTRIBUTES: NONE
L2 SCR 1838
L4 893893 SEA FILE=REGISTRY ABB=ON PLU=ON PMS/CI
L6 619344 SEA FILE=REGISTRY ABB=ON PLU=ON L4 NOT SI/ELS AND NC<4
L8 19386 SEA FILE=REGISTRY SUB=L6 SSS FUL L1 AND L2
L30 SCR 1839 AND 2006
L31 STR

sub set STR



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VAR G3=S/N/O
REP G4=(1-3) A
VAR G5=14/16/18/20/22/23
NODE ATTRIBUTES:
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GGCAT IS UNS AT 1
GGCAT IS MCY UNS AT 14
GGCAT IS PCY UNS AT 16
GGCAT IS PCY UNS AT 18
GGCAT IS PCY UNS AT 20
GGCAT IS PCY UNS AT 22
GGCAT IS PCY UNS AT 23
DEFAULT ECLEVEL IS LIMITED
ECOUNT IS E6 C AT 14
ECOUNT IS E20 C E2 O AT 16

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ECOUNT  IS E26 C  E2 O  AT  18
ECOUNT  IS E9 C  E1 O  AT  20
ECOUNT  IS E10 C  AT  22
ECOUNT  IS E14 C  AT  23

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  18

STEREO ATTRIBUTES: NONE
L33         4246 SEA FILE=REGISTRY SUB=L8 SSS FUL L31 AND L30
L34         2777 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L33
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Brief #1
3/12/03

102 art for Brood, as marked, contains No oligos

SCHNIZER 09/627,787

=> d bib abs hitstr l37 1

L37 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2001 ACS
AN 1999:27743 HCAPLUS
DN 130:86213
TI Stents coated with fluoroalkyl groups for use in prophylaxis of restenosis
IN Krause, Werner
PA Schering A.-G., Germany
SO PCT Int. Appl., 20 pp.
CODEN: PIXXD2
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9858680	A2	19981230	WO 1998-EP3627	19980618
	WO 9858680	A3	19990527		
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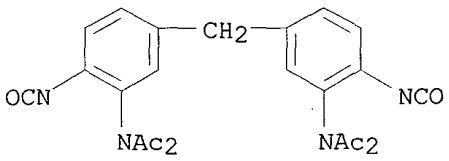
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	EP 993308	A2	20000419	EP 1998-936352	19980618
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
PRAI	DE 1997-19727838		19970624		
	WO 1998-EP3627		19980618		

AB Metallic or plastic stents are coated with a carrier polymer linked to perfluoroalkyl chains which protrude from the stent surface like a brush. This coating renders the stent biol. inert and prevents foreign-body reactions which might lead to restenosis. Thus, stents were dip-coated with a polyurethane prepd. from 3,3'-diacetylaminodiphenylmethane-4,4'-diisocyanate and butanediol, from which the Ac protecting groups were removed after polymn. Free amino groups in the polymer were derivatized by reaction with perfluoropalmitoyl chloride.

IT **218454-60-5**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(deacetylated, perfluoropalmitoylated; stents coated with fluoroalkyl groups for use in prophylaxis of restenosis)
RN 218454-60-5 HCAPLUS
CN Acetamide, N,N'-[methylenebis(6-isocyanato-3,1-phenylene)]bis[N-acetyl-, polymer with butanediol (9CI) (CA INDEX NAME)

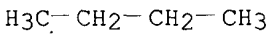
CM 1

CRN 218454-59-2
CMF C23 H20 N4 O6



CM 2

CRN 25265-75-2
CMF C4 H10 O2
CCI IDS
CDES 8:ID



2 (D1—OH)

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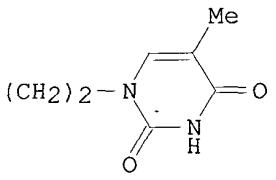
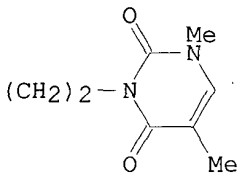
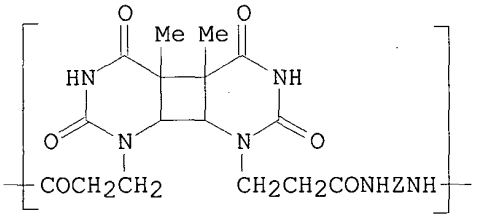
L37 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2001 ACS
AN 1990:242892 HCAPLUS
DN 112:242892
TI Studies on the developments of photosensitive polymers by using **nucleic** acid analogs
AU Takemoto, Kiichi
CS Fac. Eng., Osaka Univ., Suita, 565, Japan
SO Kenkyu Hokoku - Asahi Garasu Kogyo Gijutsu Shoreikai (1989), 54, 271-7
CODEN: AGKGAA; ISSN: 0365-2599
DT Journal
LA Japanese
GI

R=  I  II



III

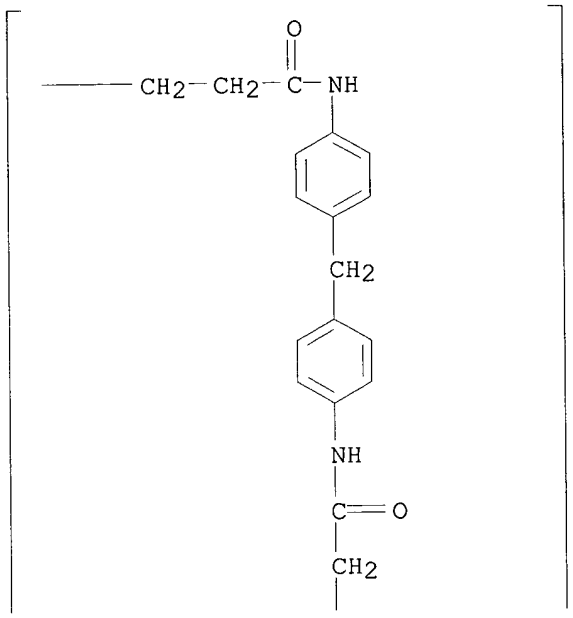
AB Polymers from CH2:CMeCO2R (R = I or II) contg. thymines as side chain and bis-pyrimidine type compds. were prepd. and the photodimerizations of thymine moieties were studied. By fixing the conformation of thymine in the film state, intramol. photodimerizations were suppressed, compared with intermol. reactions and thus, the sensitivity as photoresist could be increased. The photodegrdn. of polyamides III = (Z = diphenyl ether, diphenylmethane, siloxane etc. linkages) having thymine dimer structures were also studied and pos.-type resists having a resoln. of 0.3 .mu.m were prepd.

IT **125192-92-9**
RL: RCT (Reactant)
(photodegrdn. of, for pos.-type resists)

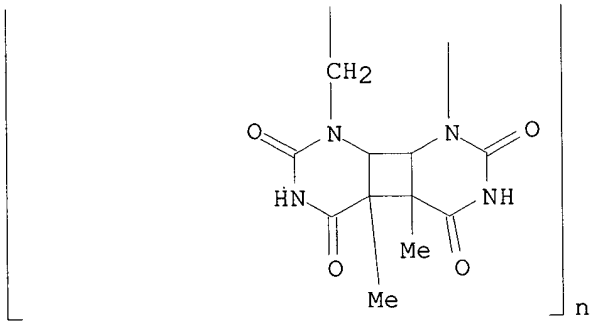
RN 125192-92-9 HCAPLUS
CN Poly[(decahydro-4a,4b-dimethyl-2,4,5,7-tetraoxocyclobuta[1,2-d:4,3-d']dipyrimidine-1,8-diyl)(3-oxo-1,3-propanediyl)imino-1,4-phenylenemethylene-1,4-phenyleneimino(1-oxo-1,3-propanediyl)],

(4a.alpha.,4b.alpha.,8a.alpha.,8b.alpha.)- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



=> d bib abs hitstr l43 1-11

L43 ANSWER 1 OF 11 HCAPLUS COPYRIGHT 2001 ACS
AN 1999:780560 HCAPLUS
DN 132:170948
TI Synthesis of Bioadhesive Lectin-HPMA Copolymer-**Cyclosporin Conjugates**
AU Lu, Zheng-Rong; Gao, Song-Qi; Kopeckova, Pavla; Kopecek, Jindrich
CS Departments of Pharmaceutics and Pharmaceutical Chemistry/CCCD and Bioengineering, University of Utah, Salt Lake City, UT, 84112, USA
SO Bioconjugate Chem. (2000), 11(1), 3-7 → Does not intervene date
CODEN: BCCHES; ISSN: 1043-1802
PB American Chemical Society
DT Journal
LA English
AB An amino group contg. **cyclosporin** A (CsA) deriv. has been synthesized and **conjugated** to N-(2-hydroxypropyl)methacrylamide (HPMA) copolymer via an arom. azo bond, which can be specifically cleaved by azoreductase activity in colon to release the **drug** for the treatment of colon diseases. Lectins, peanut (Arachis hypogea) agglutinin (PNA) and wheat germ agglutinin (WGA), have been **conjugated** to HPMA copolymer-CsA deriv. **conjugates** (PCsA), resp., to give bioadhesive **conjugates**. The PNA and WGA are the targeting proteins that can bind to diseased colon tissue and healthy tissue, resp. There were on av. four P(CsA) copolymer chains attached on one WGA **mol**. with a **drug** content of 16.0 wt % and five P(CsA) copolymer chains attached on one PNA **mol**. with a **drug** content of 11.5 wt %. The incubation of a P(CsA) copolymer with the rat cecal contents resulted in the cleavage of the azo bond and release of the **cyclosporin** deriv. The biol. evaluation of the **conjugates** is under way.
IT **258856-47-2DP, conjugates** with lectins
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); SPN (Synthetic preparation); THU (Therapeutic use); **BIOL (Biological study)**; PREP (Preparation); PROC (Process); USES (Uses)
(prepn. of bioadhesive lectin-HPMA copolymer-**cyclosporin conjugates**)
RN 258856-47-2 HCAPLUS
CN Cyclosporin A, 6-[(3R,4R)-3-hydroxy-N2,4-dimethyl-N6-[2-[[(2S)-4-methyl-2-[[4-[[4-[(2-methyl-1-oxo-2-propenyl)amino]phenyl]azo]benzoyl]amino]-1-oxopentyl]amino]ethyl]-6-oxo-L-lysine]-, polymer with N-(2-hydroxypropyl)-2-methyl-2-propenamide and N-(2-methyl-1-oxo-2-propenyl)glycylglycine 4-nitrophenyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 258856-46-1
CMF C85 H137 N17 O16

Absolute stereochemistry.
Double bond geometry unknown.

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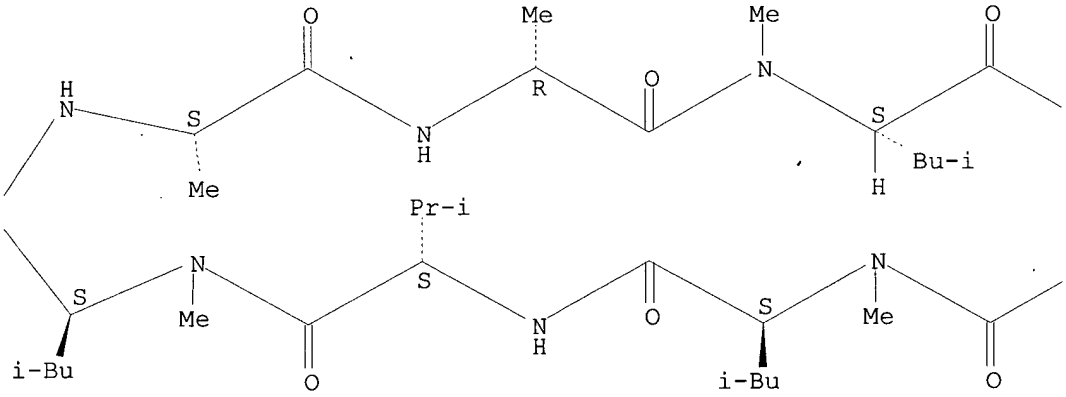
PAGE 1-B



Cyclosporine

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